



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety Administration**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

July 14, 2014

John Carter Biffle
Pipeline Operator
Summit Midstream Partners, LLC
1101 Fourth Street, SE, Ste. 201
Stanley, ND 58784

**RE: Review of Substantial Harm Plan: Polar Facility Response Plan, Sequence Number: 2812
June 2014**

Dear Mr. Biffle:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has received and reviewed Summit Midstream Partners, LLC's amended oil spill response plan for Polar Facility dated June 2014. We conclude that the Plan complies with PHMSA's regulations concerning onshore oil pipelines found at 49 Code of Federal Regulations (CFR) Part 194.

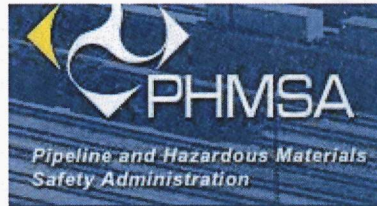
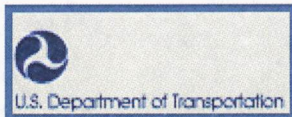
You must revise and resubmit a Response Plan for review by **July 8, 2019**. If discrepancies are found during PHMSA inspections or if new or different operating conditions or information would substantially affect the implementation of this plan, you will be required to resubmit a revised plan. See 49 CFR § 194.121(b).

Should you have any questions or concerns, please contact me at (202) 366-4595 or by email at PHMSA.OPA90@dot.gov. Please include the sequence number and your PHMSA Operator Identification Number on any future correspondence.

Sincerely,

David K. Lehman, Director
Emergency Support and Security Division
Office of Pipeline Safety

cc: PHMSA Central Region
Derrick Malone, The Compliance Group, Inc., 14884 Hwy 105 W., Suite 100
Montgomery, TX 77356



DOT/PHMSA PIPELINE FACILITY RESPONSE PLAN

JUNE 2014

Prepared By:  The Compliance Group, Inc.
step into compliance

**SUMMIT MIDSTREAM PARTNERS, LP
PIPELINE FACILITY RESPONSE PLAN (FRP)**

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NCP and ACP Certification

Summit Midstream Partners, LP (Summit) has reviewed the National Contingency Plan (NCP) and the applicable Area Contingency Plan (ACP) (EPA Region VIII – Regional Contingency Plan) and certifies that this response plan is consistent with the NCP and the ACP as follows:

As a minimum to be consistent with the NCP, this facility response plan:

- Demonstrates an operator's clear understanding of the function of the Federal response structure, including procedures to notify the National Response Center reflecting the relationship between the operator's response organization's role and the Federal On Scene Coordinator's role in pollution response,
- Establishes provisions to ensure the protection of safety at the response site,
- Identifies the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants as provided for in the applicable ACP's

As a minimum to be consistent with the applicable ACP, this facility response plan:

- Addresses the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge,
- Identifies environmentally and economically sensitive areas,
- Describes the responsibilities of the operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge, and
- Establishes procedures for obtaining an expedited decision on use of dispersants or other chemicals.

Name	Matthew Stratmann
Date	April 15, 2014
Signature	

SECTION 1 INFORMATION SUMMARY

1.1 Facility Owner / Operator

Owner	Summit Midstream Partners, LLC
Operator	Summit Midstream Partners, LLC
Address	2100 McKinney Ave. Suite 1250 Dallas, Texas 75201
Main Phone Number	(214) 242-1955
Summit Operations Communications Center (24 Hr)	(888) 643-7929

1.2 Pipeline Descriptions

Polar 10"

The Polar 10" Pipeline originates at the aboveground header located at the northwest corner of the intersection of 54th St NW and 124th Ave NW and travels in a northerly direction, approximately 6.7 miles, and terminates at the Inergy COLT Hub in Epping, ND. The pipeline is equipped with a 20,000 bbl breakout tank that can be used for either pipeline or truck purposes. The pipeline transfers crude oil gathered from surrounding fields to the Inergy COLT Hub where it is stored in various aboveground storage tanks or pumped through connecting transmission pipelines. The pipeline was constructed in 2013 under DOT regulatory guidelines.

Polar 6"

The Polar 6" Pipeline originates at the facility gathering point on the south side of 48th St NW and travels in a westerly direction, approximately 1 mile, and terminates at the tie in on the southeast corner of the intersection of 123rd Ave NW and 48th St. NW. The pipeline transfers crude oil gathered from several well locations to the transmission pipeline tie in. The pipeline was constructed in 2013 under DOT regulatory guidelines.

Little Muddy 10"

The Little Muddy 10" Pipeline originates at the facility gathering point on the west side of CR 9 and travels in a southeasterly direction, approximately 14 miles, and terminates at the tie in to the Polar 10" Pipeline on the east side of CR42 just south of Epping, ND. The pipeline transfers crude oil gathered from several well locations to the transmission pipeline tie in. **The pipeline has not been completed as of this revision date. When the pipeline is put into service, the WCD and information in this manual will be updated accordingly.**

Divide Mainline 8"

The Divide 8" Pipeline originates at the Divide Facility located on the east side of CR 85 and travels south/southeast, approximately 43.5 miles, and terminates at Inergy COLT Hub in Epping, ND. The pipeline is equipped with a 20,000 bbl breakout tank that can be used for either pipeline or truck purposes. The pipeline transfers crude oil gathered from several well locations to the transmission pipeline tie in. The pipeline was constructed in 2013 under DOT regulatory guidelines.

1.3 Description of Response Zones

Polar 10"

The Polar 10" Pipeline traverses one Response Zone (Polar 10" Response Zone). The Pipeline Response Zone is capable of causing significant and substantial harm to the environment because the pipeline is greater than 6 5/8" in diameter, could impact navigable waters and traverses environmentally sensitive areas. Refer to page 1-4 for a list of line sections and a description of the Pipeline Response Zone.

Polar 6"

The Polar 6" Pipeline traverses one Response Zone (Polar 6" Response Zone). The Polar 6" Pipeline can cause significant harm due to the location of the response zone. The 6" Pipeline Response Zone is in close proximity to navigable waters and environmentally sensitive areas. Refer to page 1-4 for a list of line sections and a description of the Pipeline Response Zone

Divide Mainline 8"

The Divide 8" Pipeline traverses one Response Zone (Divide 8" Response Zone). The Divide 8" Pipeline can cause significant harm due to the location of the response zone. The 8" Pipeline Response Zone is in close proximity to navigable waters and environmentally sensitive areas. Refer to page 1-4 for a list of line sections and a description of the Pipeline Response Zone

1.4 Qualified Individual and Alternate

John Carter Biffle	Office:	N/A
	Mobile:	701-641-6218
	E-Mail:	Jbiffle@summitmidstream.com
	Office Address:	1101 Fourth Street SE, Suite 201 Stanley, ND 58784
Joe Velasquez	Office:	(214) 242-1967
	Mobile:	(505) 360-5740
	E-Mail:	JVelasquez@summitmidstream.com
	Office Address:	2657 Aero Drive Grand Prairie, TX 75052

THE QUALIFIED INDIVIDUAL HAS BEEN GRANTED FULL AUTHORITY TO IMPLEMENT THE FACILITY RESPONSE PLAN

1.5 Worst Case Discharge

The worst case discharge (WCD) would occur if the crude oil breakout tank at the Divide Facility had a release per 194.105. The following calculation takes into account adverse weather conditions:		
Tank Capacity (bbl)		20,000
Prevention Credits		%
Secondary Containment > 100%	Containment capacity is greater than 110% of the breakout tank capacity	50
Built to API Standards	Tank is built to API 653 Standards	10
Overfill Protection Standards	Tank has both a radar tank gauging system with high and high-high alarms and an independent high-high device that closes an MOV on incoming stream.	5
Testing/Cathodic Protection	Tank is cathodically protected and is inspected annually.	5
WCD Calculation		Tank Capacity: 20,000 - Prevention Credits: 14,000
WCD Volume		6,000 Barrels

WCD Methodology: Based on the WCD source comparison, the breakout tank posed the maximum drainage volume in the response zone.

Worst Case Discharge Source Comparison:

	Pipeline Segments: Formula: $(\text{Diameter ft./2}) \times (\text{Diameter ft./2}) \times 3.147 \times (\text{Length ft.}) \times 7.48052 / 42 = \text{bbls}$	
1	Divide 8" – 10.55 mile Divide Tank Facility to MLV #1 section	3,469 barrels ✓
	Polar 10" - BOL at 54 th St NW & 124 th Ave to 58 th St NW Block Valve.	2,495 barrels
	Polar 6" – 1.16 mile beginning to end section	217 barrels
	Little Muddy 10" - Construction not completed	0 barrels
2	Breakout Tank – Divide 8" Pipeline (see page above for calculation).	6,000 barrels
3	Maximum Historical Discharge for Epping Gathering System	No reportable spills have occurred on this system

Polar 10" Section Matrix

*→ 100 High
ANSI 300 #*

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	BOL at intersection of 54 th St NW & 124 th Ave NW Block Valve to 58 th St. NW Block Valve	10.75	4.43	900	Williams	55 th St NW, 56 th St NW & 57 th St. NW road crossings
2	58 th Ave NW Block Valve to Inergy COLT Hub	10.75	2.27	900	Williams	Stony Creek, City of Epping, Burlington Rail Spur/yard, 58 th St NW & 59 th St NW road crossings

Polar 6" Section Matrix

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Polar 6" Pipeline	6.625	1.16	600	Williams	Chris Creek, 122 nd Ave NW, Lake Sakakawea



Divide 8" Section Matrix

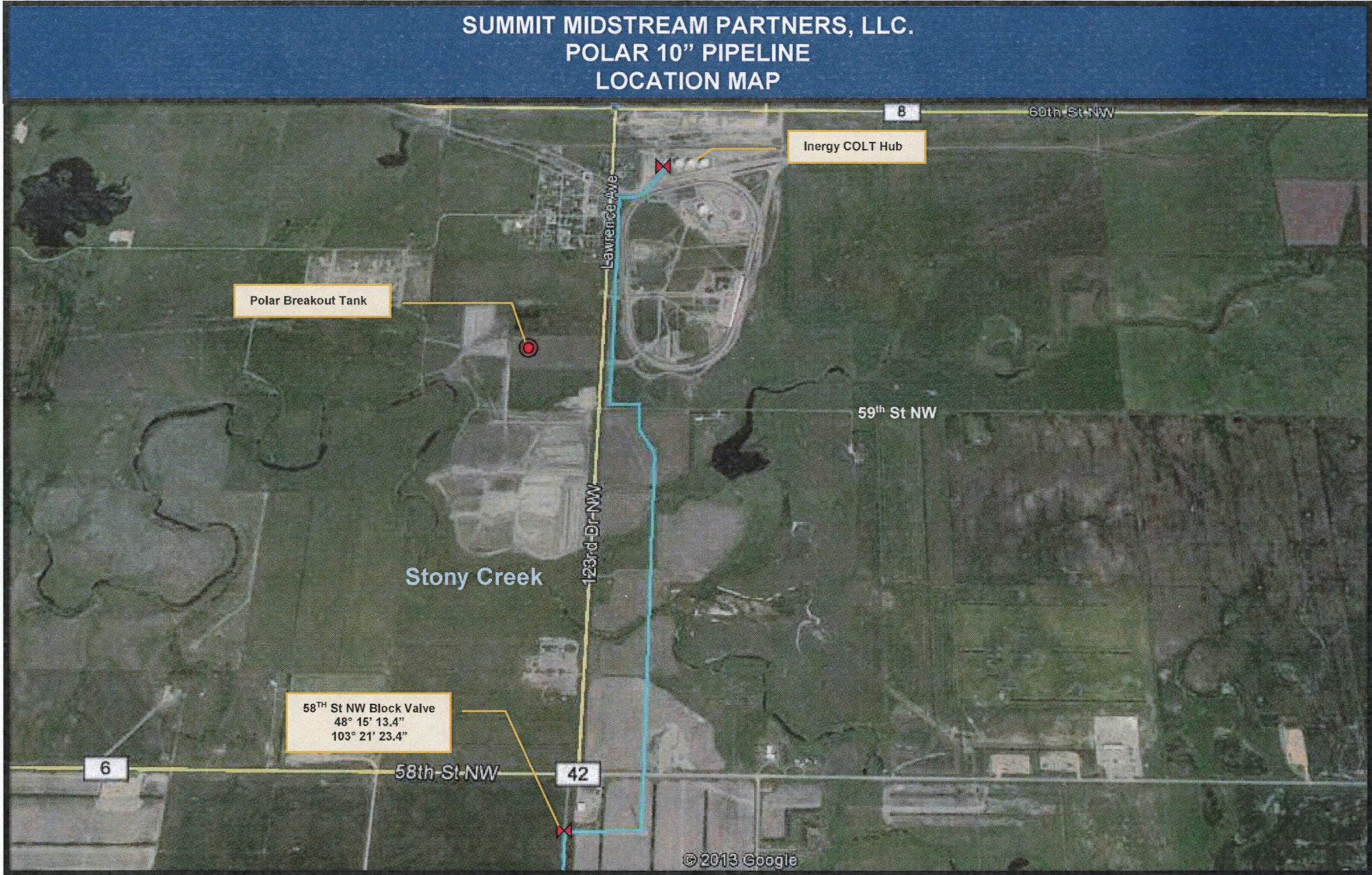
#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Divide Tank Facility to Main Line Valve #1	8.625	10.55	500	Divide	Hwy 85 NW, 94 th St, Numerous Surface Ponds, 92 nd St NW, 90 th St NW, Musta Lake, 89 th St. NW
2	Main Line Valve #1 to Main Line Valve #2	8.625	8.27	500	Divide & Williams	86 th St. NW, 85 th St NW, 133 rd Ave NW, 81 st St NW, 132 nd Ave NW, Numerous Surface Ponds
3	Main Line Valve #2 to Main Line Valve #3	8.625	8.08	500	Williams	CR 50, 129 th Ave NW, CR 12
4	Main Line Valve #3 to Main Line Valve #4	8.625	9.20	500	Williams	73 rd St NW, Lone Tree Lake, 72 nd St NW
5	Main Line Valve #4 to Main Line Valve #5	8.625	5.10	500	Williams	CR 10, 125 th Ave NW, Hwy 2
6	Main Line Valve #5 to Epping Rail Yard	8.625	2.40	500	Williams	62 nd St. NW, CR 8C, Hwy 8

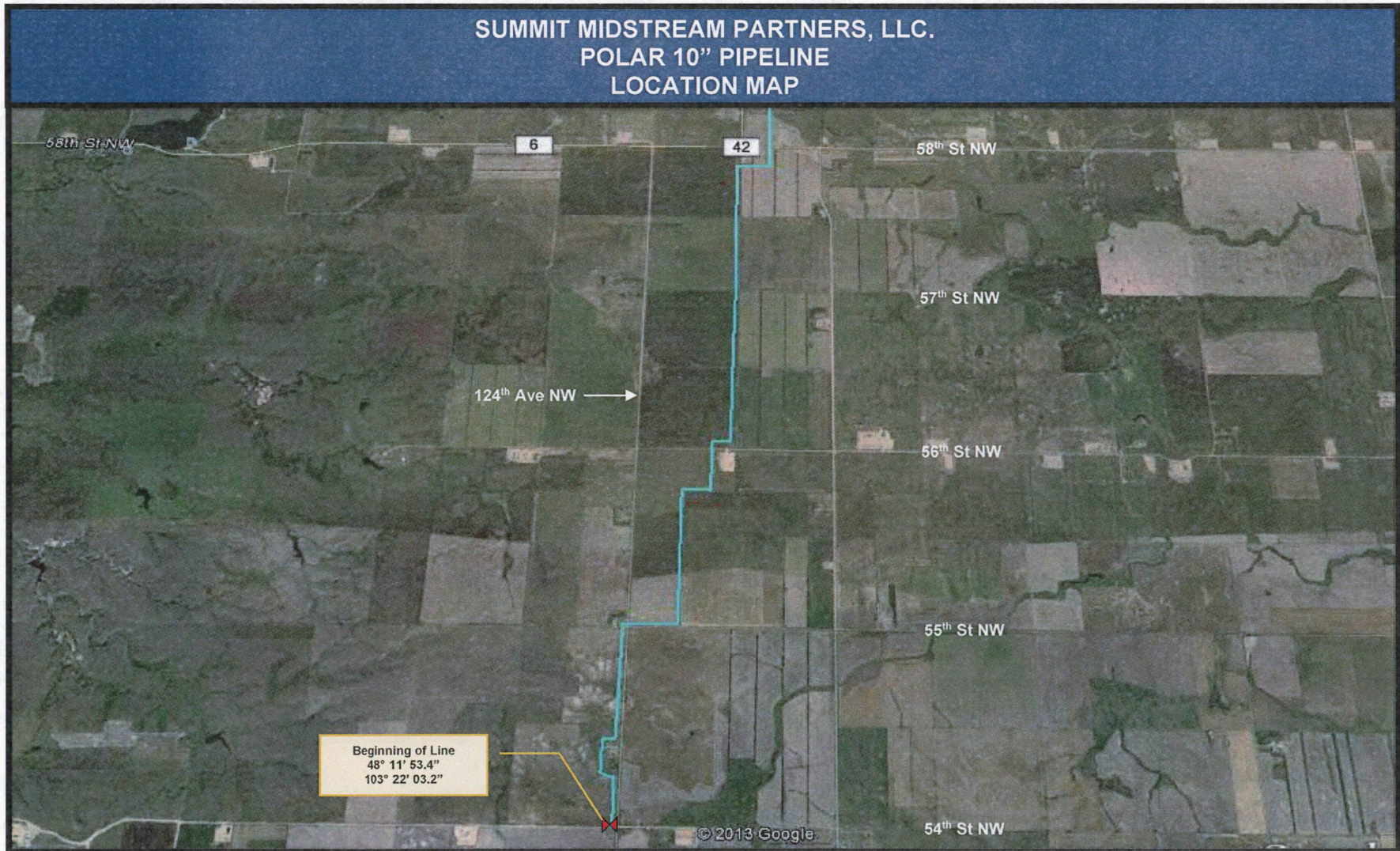
Little Muddy 10"

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Beginning of Line to Double Down Valve Set	10.750	3.65	500	Williams	CR9, numerous ponds, 131 st Ave NW, 62 nd St. NW
2	Double Down Valve Set to Irgens Valve Set	10.750	5.96	500	Williams	129 th Ave NW, Large Pond, CR 8, 128 th Ave NW
3	Irgens Valve Set to Epping Rail Yard.	10.750	4.59	500	Williams	Burlington Northern RR, Epping Dam Reservoir, Stoney Creek

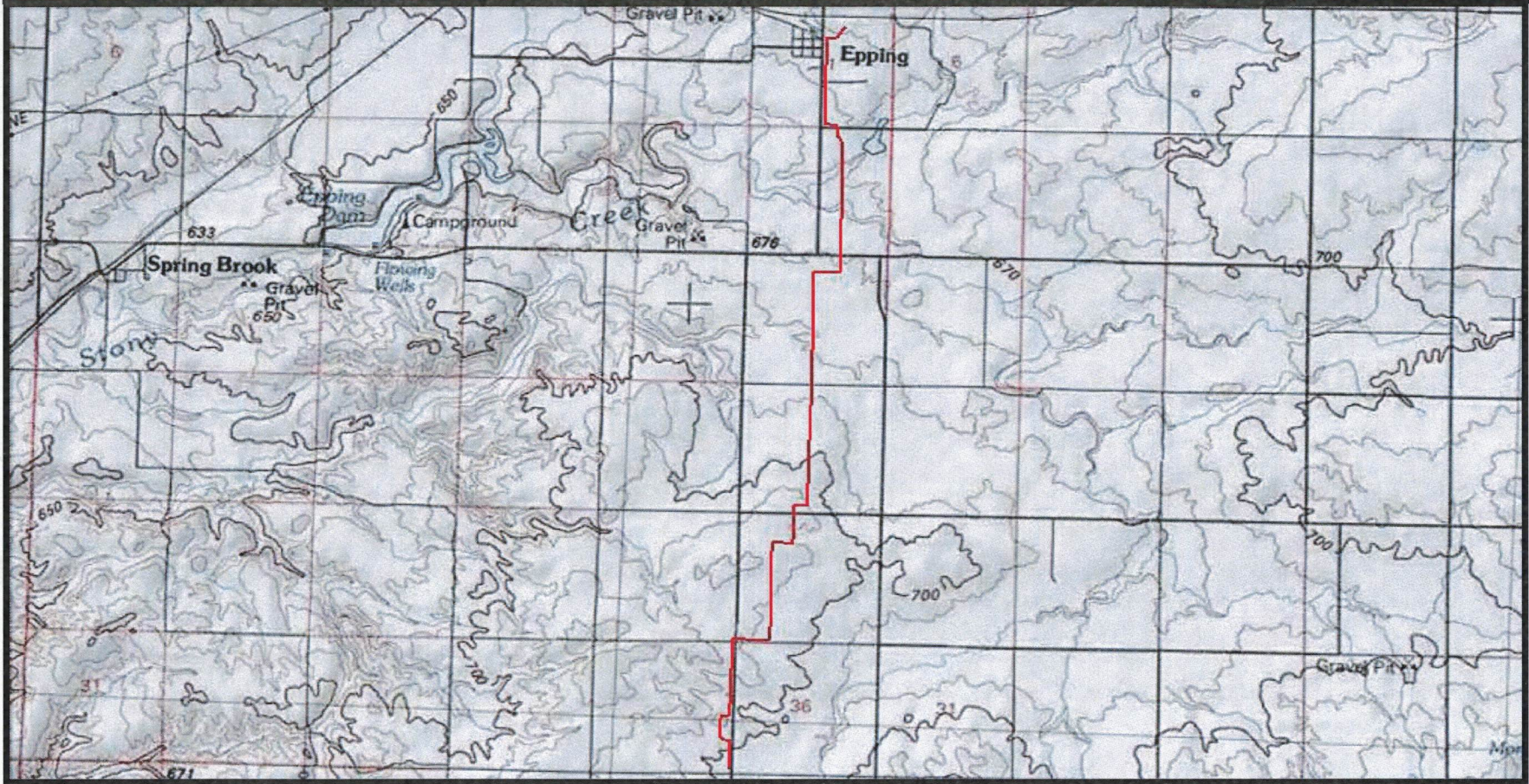
**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 10" PIPELINE
LOCATION MAP**



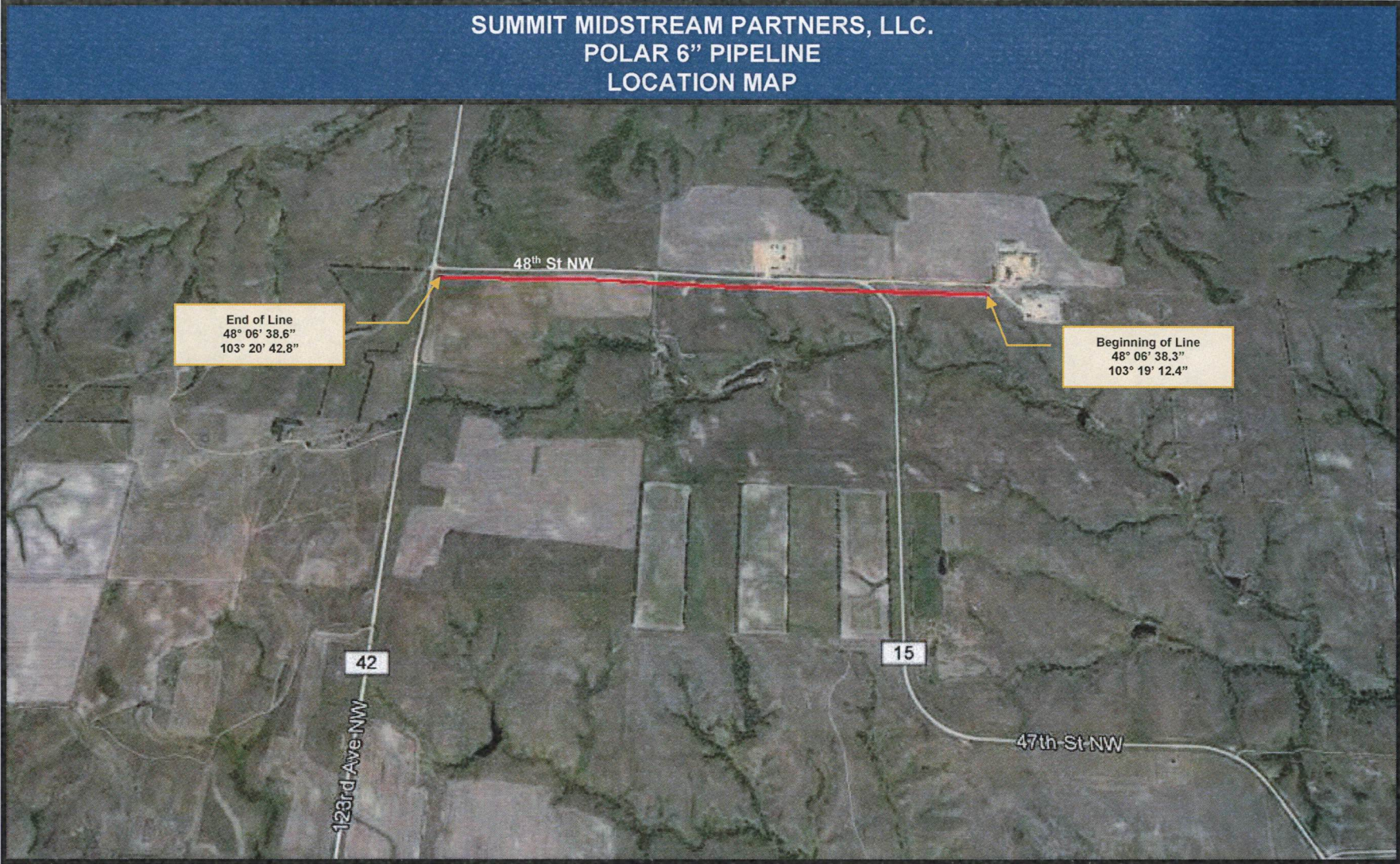




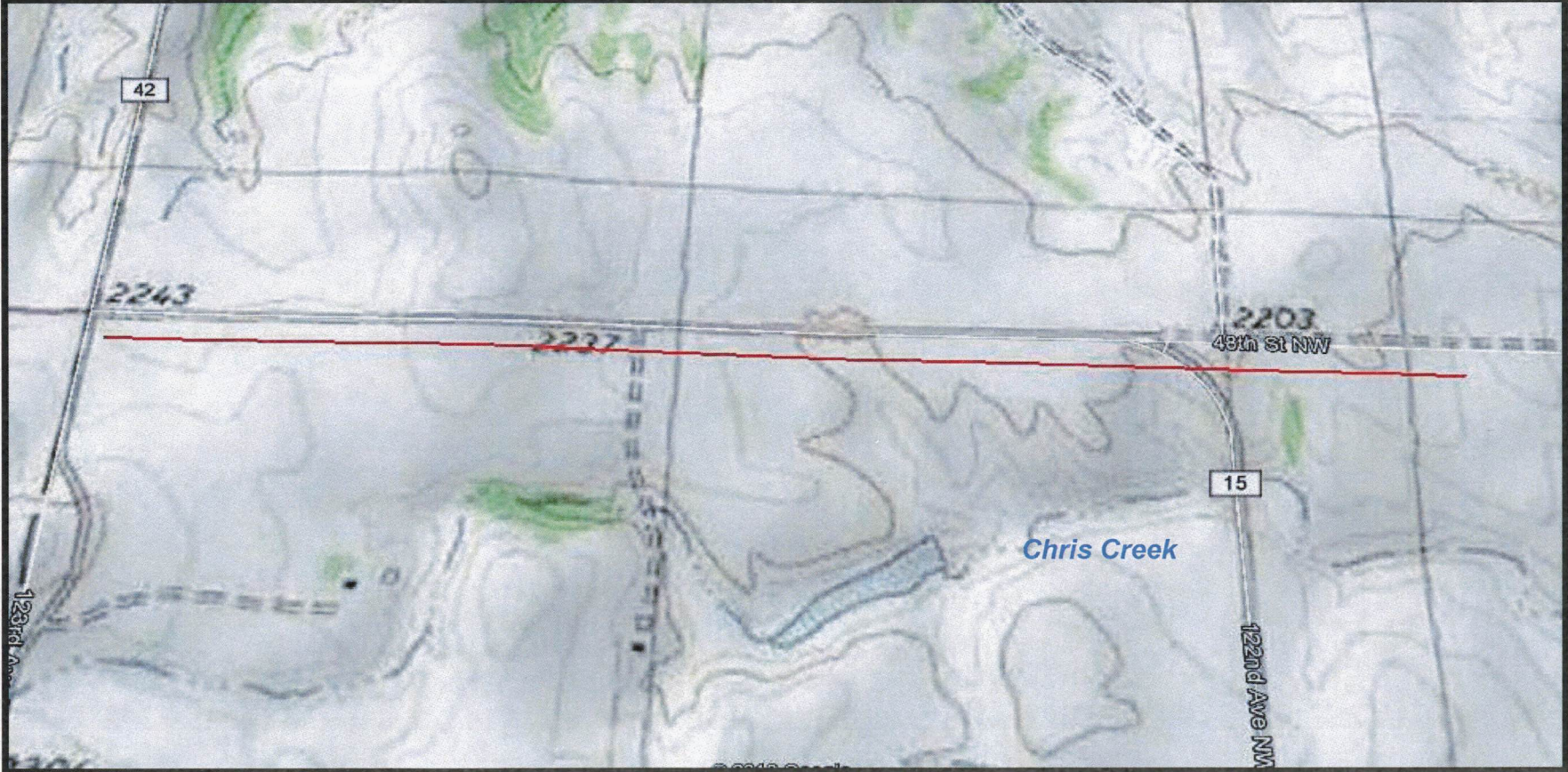
**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 10" PIPELINE
TOPOGRAPHIC MAP**

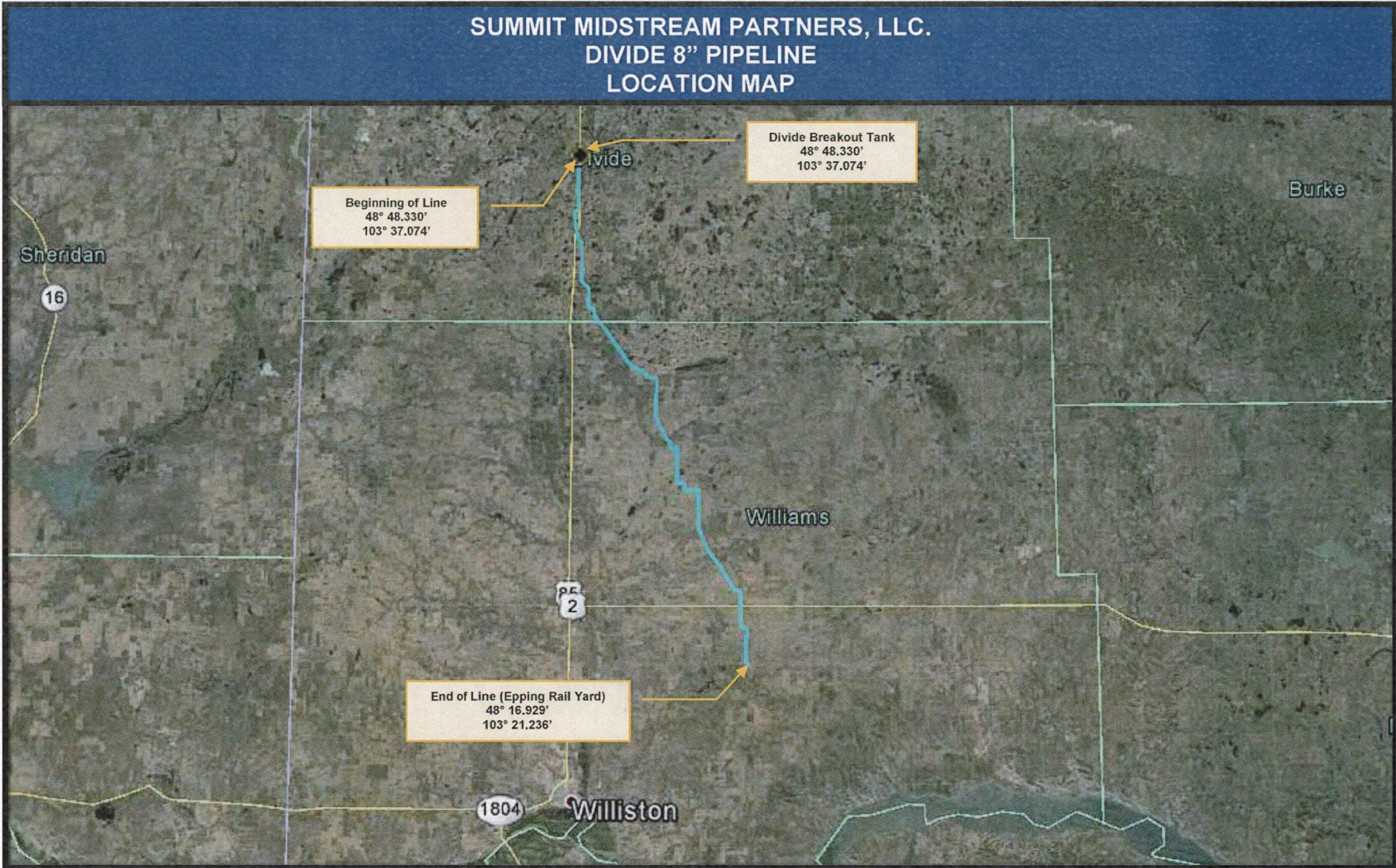




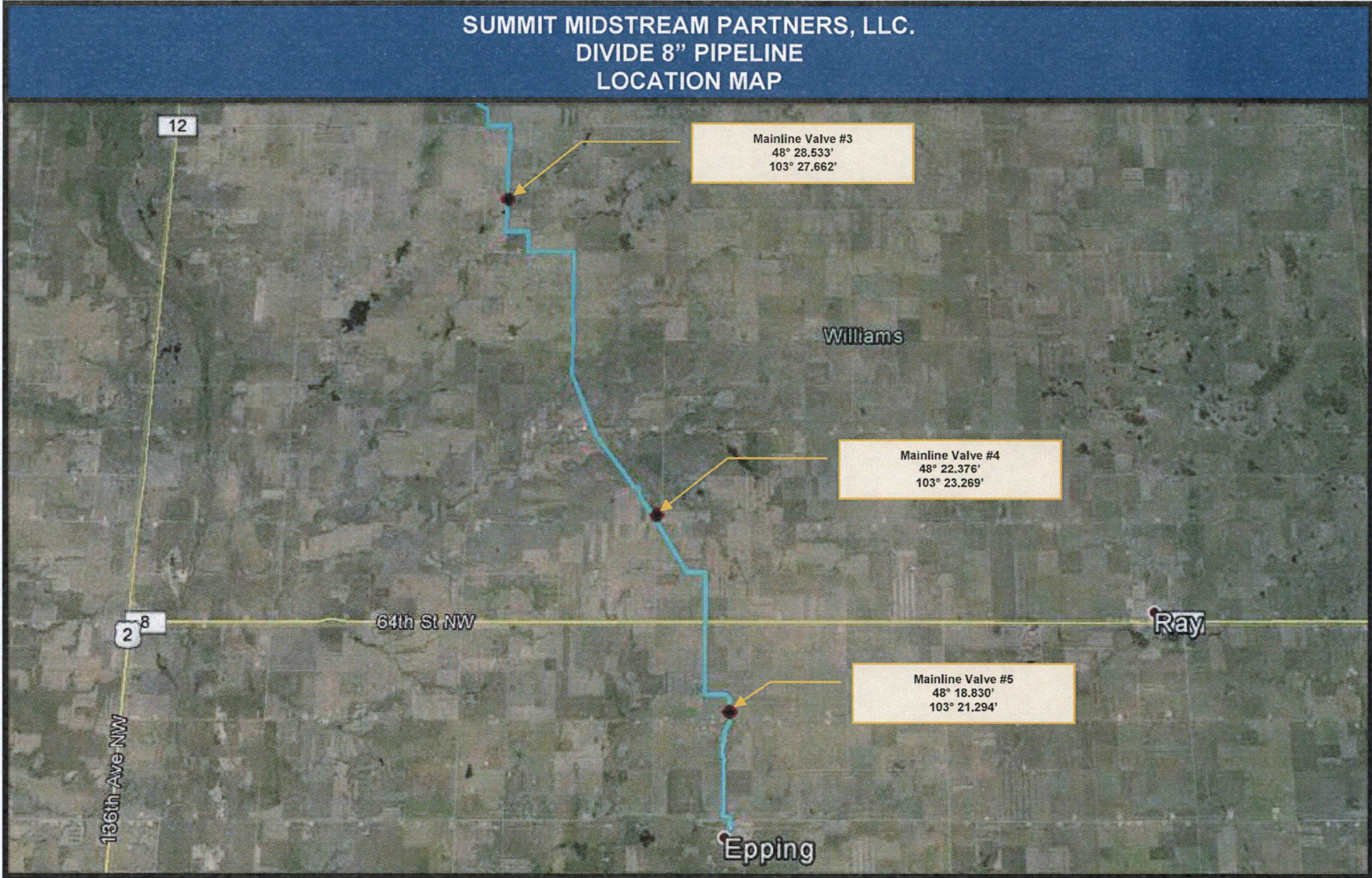


**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 6" PIPELINE
TOPOGRAPHIC MAP**

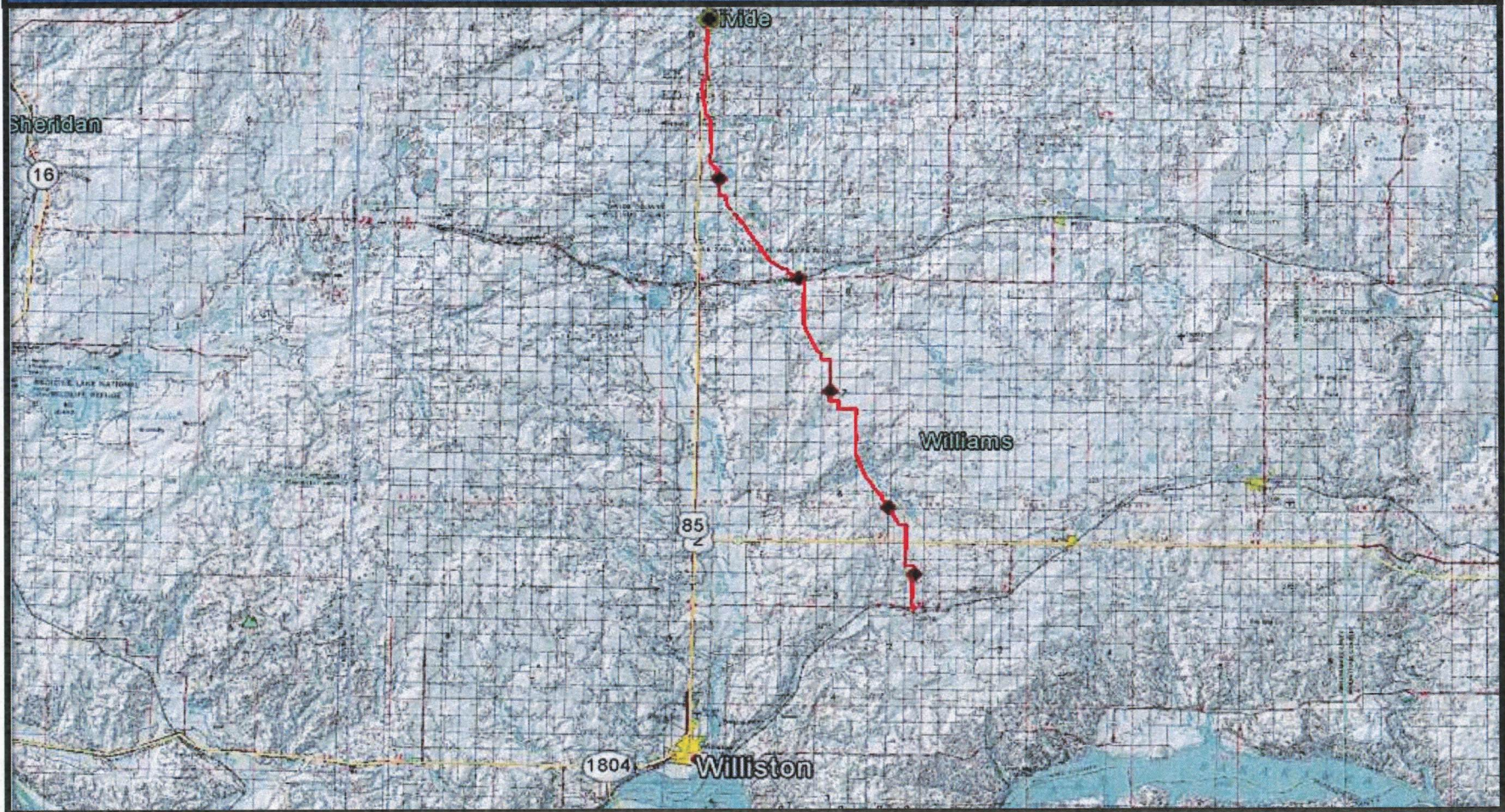


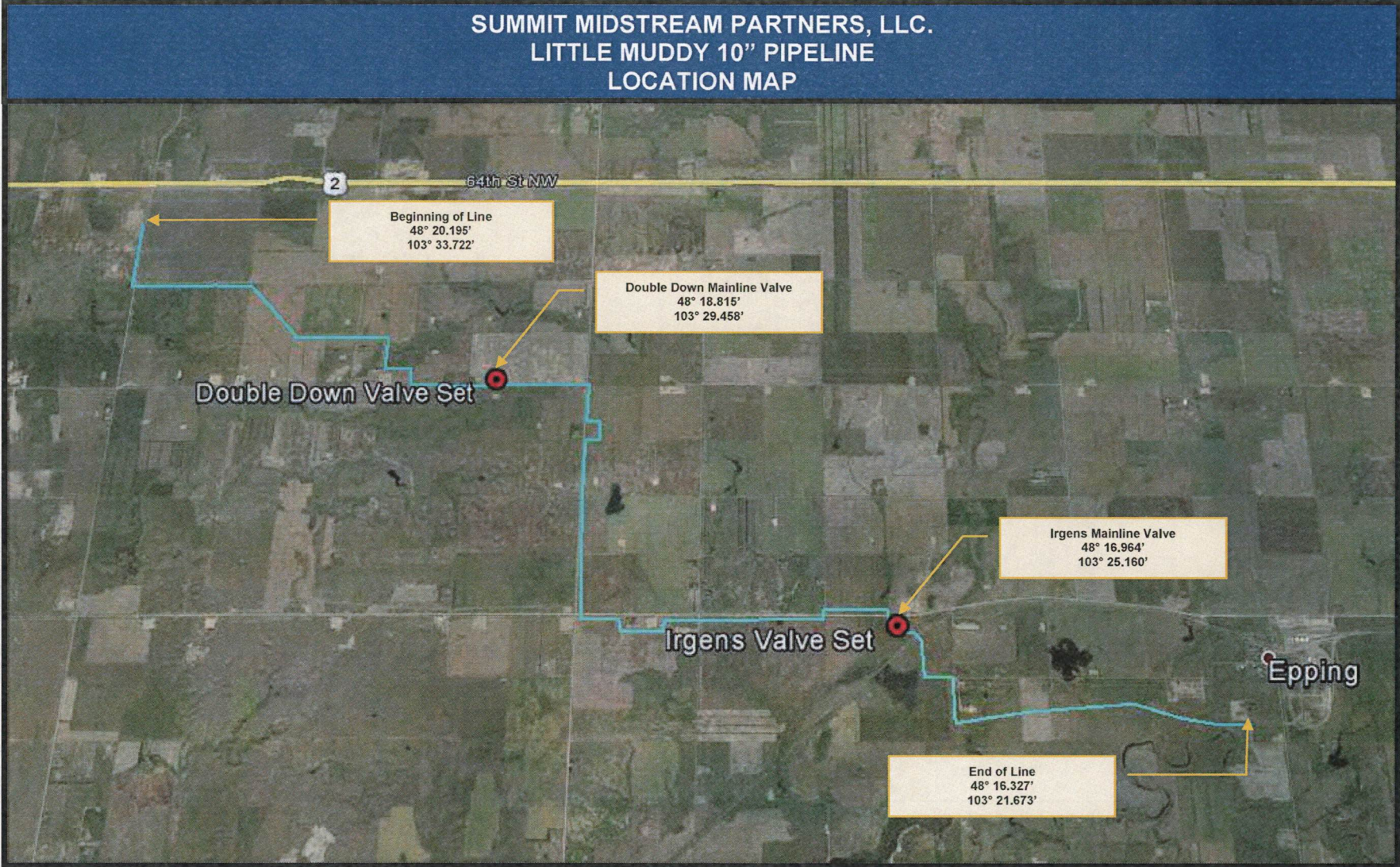


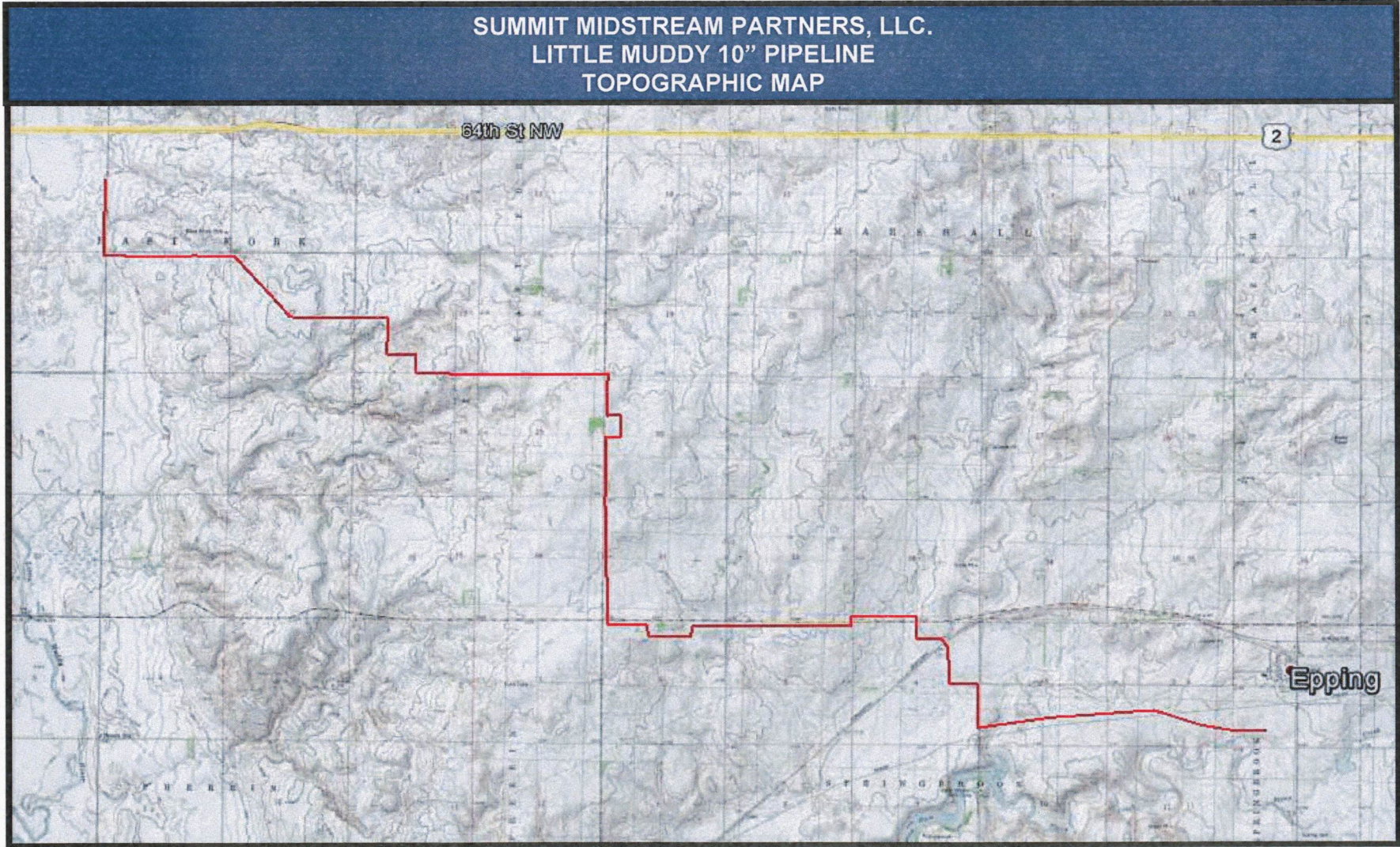




**SUMMIT MIDSTREAM PARTNERS, LLC.
DIVIDE 8" PIPELINE
TOPOGRAPHIC MAP**







1.6 Oil Spill Response Organization (OSRO)

Summit Midstream has a Master Service Agreement (MSA) with Clean Harbors to respond to a release on the Epping Area Pipelines on a 24-hour basis. Clean Harbors has the equipment necessary to properly respond to a Worst Case Discharge (WCD) on the Pipeline. Summit Midstream does not own or maintain any company-owned response equipment.

A Tier 1 (12 hr) response from Clean Harbors will be dispatched from the Williston, ND office. If the incident requires additional resources, Clean Harbors will respond from the Cannon Falls and Denver locations in a Tier 2 (36 hr) and Tier 3 (60 hr) timeframe.

Transfer hoses, connections equipment, portable pumps and all other pertinent equipment is available are loaded on quick response trailers. Vacuum trucks and portable storage equipment are available to receive oil from the pipeline and Clean Harbors has authorized facilities in which to dispose of the oil if necessary.

Clean Harbors – 24 Hour	800-645-6265
Clean Harbors – Williston Service Center	701-774-2201

- o Technical services, including sampling, laboratory analysis, and other related services;
- o Standby of personnel and equipment in anticipation of imminent activation; and
- o Training and mock spill drill deployments.

ARTICLE 3. Contractor's Warranties

- 3.1 Contractor shall provide supervision, labor, materials, tools, equipment and subcontracted items for the performance of the Services. Contractor will begin each particular Service at such time as is agreed upon between Contractor and Customer and, once having commenced any such job, Contractor will perform all such Services (i) in a good and workmanlike manner, and (ii) in a manner that meets the specifications or requirements provided by Customer or, if none are given, the recognized standards of good practice in the industry in the United States utilized by reputable persons or firms which specialize in providing similar services. Contractor shall, and shall cause its permitted subcontractors and employees to, (i) be fully qualified and, to the extent required, licensed to perform the services pursuant to all applicable governmental requirements and (ii) exercise for Customer's benefit its best knowledge and skill in planning and performing all services in a timely and efficient manner. Contractor may not subcontract all or any portion of the Services without the express written consent of the Customer, which consent shall not be unreasonably withheld.
- 3.2 Contractor shall take necessary precautions for the safety of its employees, and shall comply with applicable provisions of the Occupational Safety and Health Act. It is understood and agreed, however, that Contractor shall not be responsible for the elimination or abatement of safety hazards created by or otherwise resulting from work being performed by Customer's employees, its other contractors or agents.
- 3.3 Contractor represents that it holds the permits, licenses and other governmental authorizations required for the performance of Services, and that it has or will obtain all intellectual property rights needed to perform the Services and for Customer to be able to utilize the Services in the intended manner.
- 3.4 Contractor at its sole cost and expense shall forthwith re-perform or otherwise correct, to the satisfaction of Customer, any portion of the Services that is determined during the course of the Work or prior to acceptance thereof to be unsound or defective or that fails to conform to the the provisions of this Agreement. Contractor shall perform such corrective action as to any matter found to be defective within 12 months after completion of such Services or the termination of this Agreement. Customer understands that some Services, by their nature, cannot be re-performed.
- 3.5 Contractor shall keep all Confidential Information strictly confidential and shall not disclose it to any person in any manner or use it for any purpose other than to perform

STANDBY EMERGENCY RESPONSE AGREEMENT

This Standby Emergency Response Agreement (this "Agreement") is made this 31st day of December 2013, by and between Clean Harbors Environmental Services, Inc., and affiliates, a Massachusetts corporation, with offices located at 42 Longwater Drive, P.O. Box 9149, Norwell, MA 02061-9149 ("Contractor"), and Summit Midstream Partners, LLC, a Delaware limited liability company, with its principal place of business at 2100 McKinney Avenue, Suite 1250, Dallas, TX 75201 ("Customer").

WHEREAS, Contractor is engaged in the business of providing Services (as defined below) of an emergency response nature to respond to discharges of oil or other hazardous substances; and

WHEREAS, Customer desires to engage Contractor to provide such Services; and

WHEREAS, Customer and Contractor desire to establish the terms and conditions pursuant to which such Services will be provided.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

ARTICLE 1. Purpose

- 1.1 This Agreement establishes the terms and conditions pursuant to which Contractor may furnish Customer with Services in connection with response to discharges of oil or other hazardous substances.
- 1.2 This Agreement shall not obligate Customer to purchase Services from Contractor, nor shall it obligate Contractor to provide Services, but shall govern all orders for Services issued by Customer and accepted by Contractor. Contractor will use best efforts to respond to requests by Customer for Services.

ARTICLE 2. Scope of Services

- 2.1 The services (the "Services") contemplated in connection with the response to discharges of oil or other hazardous substances may include, but not be limited to, the following:
 - o Containment, recovery, repackaging and removal of materials;
 - o Site evaluation, decontamination and restoration;
 - o Transportation, storage, treatment or disposal of wastes;

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- 4.1 Customer shall provide full and complete information regarding the requirements for the Services set forth therein.
- 4.2 Customer shall designate a representative ("Customer's Representative") who shall be fully acquainted with the Services to be provided hereunder and who shall be authorized to approve changes in the Services; render decisions promptly; authorize commitments and expenditures on behalf of Customer; approve Contractor's daily worksheets and to accept, verify and approve Contractor's invoices.
- 4.3 Customer shall be responsible for repairs to all private property, roadways, structures and rights-of-way resulting from Contractor's reasonable use thereof for purposes of performance of the Services.
- 4.4 Customer represents and warrants that it shall provide payment to Contractor for the services provided by Contractor as set forth in Article 5..
- 4.5 Customer shall communicate to Contractor all special hazards or risks known to or learned by the Customer during the term hereof which are related to the performance of Services pursuant to this Agreement.
- 4.6 Customer shall provide full and complete information regarding the site, surface and subsurface conditions, utility locations, site ownership, contractor access, hazardous materials or wastes and other substances or hazards likely to be present and any other reports, documentation or information concerning the site or Services which may reasonably be provided to Contractor. Customer represents and warrants to Contractor that Customer has the requisite legal right, title, and interest necessary to provide access to the job site. In the event subsurface or latent conditions at the work site materially differ from those indicated in the contract documents or if the latent or subsurface physical conditions are of an unusual nature not ordinarily found to exist in environmental service activities identified in the contract documents, the Contractor shall be entitled to an equitable adjustment of the Contract price and time for any expenses incurred as a result thereof.

ARTICLE 5. Compensation

- 5.1 The payment terms set forth herein are contingent upon the approval of Contractor's Credit Department. In the event of a material impairment to Customer's financial condition based upon objective criteria, Contractor reserves the right to seek adequate assurances from Customer. The failure of Contractor to exercise its rights under this article at any time shall not constitute a waiver of Contractor's continuing right to do so.
- 5.2 Customer agrees to pay Contractor for Services in accordance with Contractor's Rate Schedule for emergency response work ("Rates") in effect at the time Services are rendered. Customer hereby assigns to Contractor all rights to any insurance payments that Customer may be entitled to receive to pay for the Services provided under this

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the Services. The Confidential Information shall be and remain the property of Customer and within thirty days of request by Customer, Contractor shall return to Customer all of the original Confidential Information and shall destroy any copies or reproductions thereof, regardless of form or medium, in its possession and in the possession of any person to whom it was disclosed by Contractor pursuant to this Agreement. If requested by Customer, a senior officer of Contractor shall certify in writing to Customer as to Contractor's compliance with this Section 3.5. "Confidential Information" shall mean all documents and other information (a) relating to Customer's or its affiliates or customers operations, facilities, processes, plans, intentions, product information, know-how, designs, trade secrets, software, market opportunities or business affairs obtained from performing the Services or (b) ascertainable by the inspection and/or analysis of samples, which is disclosed to Contractor by Customer, obtained by Contractor from Customer or a third party acting on Customer's behalf, or generated by Contractor in the course of performance of the Services. The term Confidential Information shall be deemed not to include information that, as shown by written or electronic evidence of Contractor (i) is already known to Contractor prior to Contractor performing any Services for Customer, (ii) is already in possession of the public or becomes available to the public other than through the act or omission of Contractor, (iii) is acquired independently by Contractor from a third party that has the right to disseminate such information at the time it is acquired by Contractor, or (iv) is developed by Contractor independently (other than as a result of the performance of the Services) of the Confidential Information received from Customer or a third party acting on Customer's behalf.

- 3.6 Contractor agrees to retain all records related to the Services for three years after the expiration or termination of this Agreement, and agrees that Customer (or its designated professional advisors) may, at any time until the expiration of such three-year period, at its own cost and expense, and upon providing reasonable prior written notice to Contractor, audit any such records for purposes of verifying compliance with the terms and conditions of this Contract. Customer and/or its authorized representatives shall have the right to reproduce and retain copies of any of the aforesaid records. In addition, all safety, environmental and health information furnished by Contractor to Customer will be subject to audit at Customer's own cost and expense and upon providing reasonable prior written notice and shall be retained by Contractor for the term of any warranty period plus three years, or as otherwise required by a governmental requirements.
- 3.7 To the extent it receives payment hereunder, Contractor hereby fully and forever waives, on behalf of itself and any subcontractor, all rights under applicable law to assert or file any mechanics lien or similar lien with respect to the Services, and Contractor hereby agrees to defend and indemnify the Customer Group and remove from any property any such liens.

ARTICLE 4. Customer's Warranties



ARTICLE 6. Changes in Work

- 6.1 Customer agrees to pay Contractor at the Rates for any costs incurred or delays resulting from Contractor's response to any emergency condition not caused by Customer Group which threatens safety of persons or property during the performance of the Services.
- 6.2 If any change occurs during the term of this Agreement with respect to any laws, rules, regulations, or ordinances which affect the rights or obligations of Customer to Contractor under this Agreement, or the applicability of any taxes or fees, or the cost of handling waste materials, Customer and Contractor shall negotiate in good faith to bring this Agreement into conformance with such change or changes. In the event such an agreement cannot be reached, Customer or Contractor shall have the right to terminate this Agreement immediately upon written notice to the other party.

ARTICLE 7. Insurance

- 7.1 Contractor will, at its sole expense, purchase and maintain, and require its subcontractors to purchase and maintain, during the term of this Agreement, insurance policies with substantial and sound insurers having coverage of the types and in the amounts specified below prior to the execution of this Agreement. Each insurance policy will be primary insurance as to all matters arising out of or related to the obligations of Contractor either arising under this Agreement or under applicable law (including the performance of the Services), and exclusive of any other existing valid and collectible insurance. Each insurance policy will name the Customer as additional insured in the performance of both Contractor's ongoing and completed operations and waive subrogation against Customer and its insurers. Contractor shall keep in effect during the term of this Agreement the following minimum insurance coverages:

COVERAGE	LIMITS
Worker's Compensation	Statutory
Auto Liability	\$1 million per occurrence \$1 million aggregate
Comprehensive General Liability	\$1 million per occurrence \$3 million aggregate
Employer's Liability	\$1 million per occurrence \$1 million aggregate
Umbrella Liability	\$5 million per occurrence \$5 million aggregate

- 7.2 Contractor shall provide Customer with a certificate of insurance upon written request.

ARTICLE 8. Indemnification

(B)

Agreement and hereby authorizes its insurance company or agent to pay Contractor directly to the extent that Customer fails to make payment. Customer's obligation to pay amounts due pursuant to this Agreement shall not be conditioned upon or limited by the types, amounts or availability of insurance coverage.

- 5.3 Contractor shall be solely responsible for the ascertainment of, timely filing for, and prompt payment of, any and all Contractor Taxes. Contractor acknowledges that Contractor has taken into account Contractor Taxes in establishing the Rates. "Contractor Taxes" shall mean any and all applicable taxes, duties, levies, and assessments (including, without limitation, income, profit, value-added, turnover, withholding, social security, employment and payroll-related taxes, whether personal, corporate or otherwise, together with any interest, fines, penalties and other charges thereon imposed by any nation, federal, state, local, or other governmental requirement or taxing authority (a) on Contractor Group in connection with the Services performed by Contractor Group related to this Agreement, (b) on any consideration paid by Customer to Contractor pursuant to this Agreement, (c) on any consideration paid by Contractor to any member of Contractor Group in connection with this Agreement or (d) on or for the account of any property or equipment of Contractor Group used in connection herewith.
- 5.4 Contractor will present its first invoice to Customer as soon as possible following commencement of Services provided hereunder, and may issue subsequent invoices every five (5) days thereafter. Customer agrees to pay the full undisputed amount of each invoice amount within fifteen (15) business days of the date of receipt of said invoice by Customer's Representative.
- 5.5 Customer agrees that interest shall accrue and will be paid to Contractor on any unpaid balance of any invoice after fifteen (15) business days of receipt of invoice by Customer at the rate of one and one half percent (1.5%) per month or the maximum amount allowed by law.
- 5.6 In the event that legal or other action is required to collect unpaid balances of invoices due Contractor, Customer agrees to pay all costs of collection, litigation or settlement incurred by Contractor, including reasonable attorneys fees. "Legal or other action" as used above shall include bankruptcy and insolvency proceedings.
- 5.7 In the event that work is suspended or terminated for any reason prior to the completion of the Services, Customer agrees to pay for labor, equipment, materials, disposal and other costs incurred by Contractor at the Rates and for reasonable demobilization costs.
- 5.8 Customer agrees to pay Contractor in accordance with the Rates for any litigation support or testimony provided by Contractor in connection with, or arising out of, the work performed by Contractor hereunder.

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any claims, costs, liabilities, demands or causes of action caused by the transportation or disposal of oil, waste materials or hazardous materials by Contractor Group.

ARTICLE 9. Excuse of Performance

The performance of this Agreement, except for the payment of money for Services already rendered, may be suspended by either party in the event performance of this Agreement is prevented by a cause or causes beyond the reasonable control of such party and without the fault or negligence of such party. Such causes shall include but not be limited to: acts of God, acts of war, riot, fire, explosion, accidents, inclement weather, or sabotage; lack of adequate fuel, power, raw materials, labor or transportation facilities; changes in government laws, regulations, orders, or defense requirements; restraining orders, labor dispute, strike, lock-out or injunction (provided that neither party shall be required to settle a labor dispute against its own best judgements). The party which is prevented from performing by a cause beyond its reasonable control shall use its best efforts to eliminate such cause or event.

ARTICLE 10. Termination

This Agreement may be terminated by either party upon five (5) days prior notice to the other party, provided that any such termination will not affect any order for Services already entered into but not yet fully performed unless specifically agreed to by both parties. Notwithstanding the foregoing, Customer may cause Contractor to cease work at any time by notice to Contractor. Contractor shall be entitled to receive payment for work properly performed prior to the earlier of termination or an instruction to cease work plus reasonable demobilization costs.

ARTICLE 11. Notice

Any notice to be given under this Agreement shall be in writing and delivered to the address listed below:

Customer: Summit Midstream Partners, LLC
1800 Hughes Landing Blvd. Suite 300,
The Woodlands, TX 77380
Attn: Rene Casadaban

With a copy to: Summit Midstream Partners, LLC
2100 McKinney Avenue
Suite 1250
Dallas, TX 75201
Attn: General Counsel

Contractor: Clean Harbors Environmental Services, Inc.

(15)

- 8.1 To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless Customer, its parent and affiliated companies and their respective directors, officers, employees and agents (the "Customer Group") from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, bodily injury to or death of any person or destruction of or damage to any property, except natural resource and other damages as provided in Section 8.3, which Customer may suffer, incur, or pay out, to the extent such are caused by the negligence or willful misconduct of Contractor, its agents or employees during the performance of this Agreement, or Contractor's failure to comply with any laws, regulations or lawful authority, or failure to comply with its obligations under this Agreement, except to the extent such liabilities, claims, demands and causes of action result from Customer's failure to comply with any laws, regulations or other lawful authority, or Customer's failure to comply with its obligations under this Agreement or result from the negligence or willful misconduct of Customer, its employees or agents
- 8.2 To the fullest extent permitted by law, Customer shall indemnify, defend and hold harmless Contractor, its parent and affiliated companies and their respective directors, officers, employees and agents (the "Contractor Group") from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, any bodily injury to or death of any person or destruction of or damage to property which Contractor may suffer, incur, or pay out, to the extent such are caused by the negligence or willful misconduct of Customer, its employees or agents or the failure of Customer to comply with any laws, regulations or other lawful authority or the failure of Customer to comply with its duties or obligations under this Agreement, except to the extent such liabilities, claims, demands and causes of action result from Contractor's failure to comply with any laws, regulations or lawful authority, or Contractor's failure to comply with its obligations under this Agreement or result from the negligence or willful misconduct of Contractor, its employees or agents.
- 8.3 Notwithstanding the foregoing, to the fullest extent permitted by law, Customer shall indemnify, defend and hold harmless the Contractor Group from and against any and all costs, liabilities, claims, demands and causes of action for pollution damages; contamination or adverse effects on the environment; destruction of, damage to, or loss of, whether actual or alleged, any property or natural resources, including the cost of assessing the damage; injury to or economic losses resulting from destruction of real or personal property; damages for loss of subsistence use of natural resources; damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction or loss of real property, personal property or natural resources; damages for net costs of providing increased or additional public services; removal costs; and any other costs assessable under the Oil Pollution Act of 1990, the Comprehensive Environmental Response, Compensation and Liability Act or other local, state or Federal law or lawful authority applicable to discharges or releases of oil or hazardous substances which Contractor Group, individually or collectively, may suffer, incur, or pay out in connection with, or arising out of, the release of oil or hazardous substances by Customer Group; provided, however, that the foregoing indemnity shall not apply to

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- 12.6 Survival - The provisions contained in Articles 3, 4, 5, 8 and 12 shall survive and remain in effect following the termination of this Agreement.
- 12.7 Applicable Law - This Agreement shall be interpreted and enforced according to the Laws of the State of Texas and the parties agree to submit to the jurisdiction of the courts of the State of Texas or any federal court located therein for any disputes arising under this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

CUSTOMER

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

SUMMIT MIDSTREAM PARTNERS, LC

Signature:

Bob M. Decker

Signature:

Virgil Blanchard Jr.

By: BOB M. DECKER
PRINT NAME

By: Virgil Blanchard Jr.
PRINT NAME

Title: SVP & GENERAL COUNSEL

Title: VP Field Services

42 Longwater Drive,
P.O. Box 9149
Norwell, MA 02061-9149
Attn: General Counsel (Urgent Contract Matter)

ARTICLE 12. Additional Provisions


- 12.1 Limitation of Liability - Customer agrees that Contractor shall not be responsible for pre-existing contamination at the job location, natural resource damage, or for indirect, incidental, consequential or special damages, including loss of use or lost profits, resulting from or arising out of the performance of the Services by Contractor, its employees, agents and/or subcontractors.
- 12.2 Independent Contractor; Legal Compliance - Contractor is an independent contractor and neither Contractor nor Contractor's principals, partners, employees, or subcontractors are servants, agents, or employees of Customer. Contractor shall comply with all applicable laws with respect to the Services and this Agreement.
- 12.3 Waiver; Remedies Cumulative - Any waiver by either party of any provision or condition of this Agreement shall not be construed or deemed to be a waiver of any other provision or condition of this Agreement, nor a waiver of a subsequent breach of the same provision or condition. No right or remedy conferred on or reserved to the parties by this Agreement shall be exclusive of any other right or remedy, and unless otherwise provided in this Agreement, Customer and Contractor shall retain all rights and remedies, both under this Agreement and at law, that either may have against the other.
- 12.4 Severability - If any section, subsection, sentence or clause of this Agreement shall be deemed to be illegal, invalid or unenforceable for any reason, such illegality, invalidity or unenforceability shall not affect the legality, validity or enforceability of this Agreement or other sections of this Agreement.
- 12.5 Entire Agreement - This Agreement and any Exhibits to this Agreement represent the entire understanding and agreement between Customer and Contractor and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same. Modifications to this Agreement shall be in writing and shall be signed by the Customer and Contractor. In the event of a conflict between this Agreement and any individual order for Services or the imposition of additional provisions as to matters covered by this Agreement, the provisions of this Agreement shall control. Any qualifications or modifications attached to any order for Services that attempt to modify the general terms and conditions under this Agreement (as versus provisions that solely address modifications to the scope of the Services to be performed) shall be void and not applicable as between the parties.


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SECTION 2 NOTIFICATIONS


2.1 Notification Requirements

FEDERAL NOTIFICATIONS

	<p style="margin: 0;">NATIONAL RESPONSE CENTER</p> <p style="margin: 0;">• USCG HEADQUARTERS – WASHINGTON, D.C.</p>
24 Hour Phone	800-424-8802
<p>The NRC is the sole federal point of contact for reporting oil and chemical spills which enter or threaten to enter the navigable waters of the United States. If you have a spill to report, contact the NRC via the toll-free number or visit the NRC Web Site (http://www.nrc.uscg.mil) for additional information on reporting requirements and procedures. For those without 800 access, please contact the NRC at 202-267-2675.</p> <p>At the earliest practicable moment following the discovery of a release of hazardous liquid or carbon dioxide transported resulting in an event described in 195.50, the operator of the system must give notice (within 2 hours) if that release resulted in pollution of any stream, river, lake, reservoir or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines.</p>	

	<p style="margin: 0;">ENVIRONMENTAL PROTECTION AGENCY</p> <p style="margin: 0;">• REGION 8 – DENVER, CO</p>
Region 8 Spill Hotline	800-227-8914
<p>Calls to the National Response Center will automatically be forwarded to the appropriate EPA Regional Office. However, a courtesy notification can be made directly to the applicable region.</p> <p>The Environmental Protection Agency must be notified of the following:</p> <ol style="list-style-type: none"> 1. Any unanticipated bypass exceeding effluent limitation by permit. 2. Any upset condition, which exceeds any effluent limitation in permit. 3. Violation of maximum daily discharge limitation or daily minimum toxicity limitation. 4. Chemical spills of a reportable quantity. <p>Oral notification is required within 24 hours of the incident. No written report is required.</p>	

STATE NOTIFICATIONS

 NORTH DAKOTA DEPARTMENT of HEALTH	
24 Hour Phone	800-222-6362
<p>Any spill or discharge of waste which may cause pollution of waters of the state must be reported immediately (NDAC 33-16-02.1-11 paragraph 4, bottom of page 22). The owner, operator, or person responsible for a spill or discharge must notify the department as soon as possible (701.328.5210) or the North Dakota hazardous materials emergency assistance and spill reporting number (800.472.2121) and provide all relevant information about the spill. Depending on the severity of the spill or accidental discharge, the department may require the owner or operator to:</p> <ul style="list-style-type: none"> • Take immediate remedial measures; • Determine the extent of pollution to waters of the state; • Provide alternate water sources to water users impacted by the spill or accidental discharge; or • Any other actions necessary to protect human health and the environment. <p>Non-emergency releases may be reported by filling out the online Environmental Incident Report Form:</p> <p style="text-align: center;">https://www.dmr.nd.gov/oilgas/spills/eirform.asp</p>	

LOCAL NOTIFICATIONS

LOCAL AGENCIES - 911	
Agency	24-Hour
North Dakota Highway Department	701-577-4521
Williams County Sheriff & Law Enforcement Center	701-577-7707
Williston, ND Fire Department	701-572-3400
Epping, ND City Hall (Fire Department)	701-859-5561
Divide County Sheriff	701-965-6461
Divide County Emergency Management	701-965-6361

OSRO NOTIFICATIONS

Summit Midstream has a Master Service Agreement (MSA) with Clean Harbors to respond to a release on the Epping Area Pipelines on a 24-hour basis. Clean Harbors has the equipment necessary to properly respond to a Worst Case Discharge (WCD) on the Pipeline. Summit Midstream does not own or maintain any company-owned response equipment.

A Tier 1 (12 hr) response from Clean Harbors will be dispatched from the Williston, ND office. If the incident requires additional resources, Clean Harbors will respond from the Cannon Falls and Denver locations in a Tier 2 (36 hr) and Tier 3 (60 hr) timeframe.

Transfer hoses, connections equipment, portable pumps and all other pertinent equipment is available are loaded on quick response trailers. Vacuum trucks and portable storage equipment are available to receive oil from the pipeline and Clean Harbors has authorized facilities in which to dispose of the oil if necessary.

Clean Harbors – 24 Hour	800-645-6265
Clean Harbors – Williston Service Center	701-774-2201

FEDERAL/STATE WILDLIFE NOTIFICATIONS

LOCAL AGENCIES - 911	
Agency	Phone
United States Fish and Wildlife Service – Bismarck, ND	701-250-4481
North Dakota Game and Fish – Williston, ND Office	701-774-4320
North Dakota Game and Fish – Bismarck, ND	701-328-6300

2.2 Notification Checklist

Priority	Notification	Time	Check
1	Oil Spill Removal Organization (OSRO)		<input type="checkbox"/>
2	Summit Corporate Representative <i>SOCC / Joe / rme</i>		<input type="checkbox"/>
3	National Response Center (NRC)		<input type="checkbox"/>
4	ND Department of Health (State Notification)		<input type="checkbox"/>
5	County Sheriff (if necessary)		<input type="checkbox"/>
6	County Emergency Management		<input type="checkbox"/>

2.3 Personnel Notifications

QUALIFIED INDIVIDUAL(S) / PIPELINE OPERATOR(S)			
Name	Office	Mobile	Address
John Carter Biffle	N/A	701-641-6218	1101 Fourth Street SE, Suite 201 Stanley, North Dakota 58784
Joe Velasquez	214-242-1967	505-360-5740	2657 Aero Drive Grand Prairie, Texas 75052

2.4 Qualified Individual Notification Procedures

The Summit employee who discovers the incident is responsible for initiating immediate notifications. Notification of the Qualified Individual(s) will be made by telephone, starting first with the office numbers followed by mobile numbers. Qualified Individuals are available 24-hours per day, three hundred sixty five days per year by one of the contact methods. Alternate methods of contacting the Qualified Individuals will be two-way radios when in close proximity and e-mail where available.

2.5 Spill Report Information

The following information should be provided in the initial and each follow-up notification:

<i>REPORTING PARTY</i>						
REPORTER'S NAME				POSITION		
PHONE NUMBER	DAY			EVENING		
COMPANY						
ADDRESS						
<i>INCIDENT DESCRIPTION</i>						
NAME OF PIPELINE						
DATE OF INCIDENT				TIME OF INCIDENT		
INCIDENT ADDRESS / LOCATION						
NEAREST CITY						
LATITUDE				LONGITUDE		
TYPE OF MATERIAL						
CAUSE OF DISCHARGE						
DISCHARGE TO WATER	YES	NO	ESTIMATED QUANTITY:			BBL OR GAL
DESCRIPTION OF SLICK	BARELY VISIBLE	LIGHT SHEEN	RAINBOW	DULL	DARK	
WEATHER CONDITIONS						
RESPONSE ACTIONS TAKEN OR PLANNED						

SECTION 3 SPILL DETECTION & MITIGATION

3.1 Initial Discharge Detection

The Pipeline System is protected by high/low pressure devices. The pipeline is electronically monitored 24 hours per day by the Summit main control center in Houston, Texas. The procedures used to prevent and quickly detect spills are described in the Operations and Maintenance Procedures Manual. In addition to the electronic monitoring system, leaks or ruptures are located by routine pipeline inspections. The Foreman is responsible for leak detection along the Pipeline and Stations. Following is the maximum leak detection time and shut down time in adverse weather conditions.

Leak Detection Time (hrs)	.083
Shut Down Time (hrs)	.083

3.2 Response Mitigation Procedures

Initial Detection	
1	Shut down pipeline operations to minimize the volume of released material as soon as possible.
2	Alert other people in the area of the situation and to any potential dangers caused by the release. Contact the local Sheriff if necessary to prevent personnel from entering affected area.
3	Determine the source and identify of the material. (Any response actions should be attempted only if safe and personnel are properly trained)
4	Fill out Spill Report Information Form (Section 2) and report observations to the Dispatcher and the supervisor(s) of the affected facility.
5	Standby to answer questions or perform tasks as directed by the Qualified Individual.



3.3 Response Equipment

Summit Midstream has a Master Service Agreement (MSA) with Clean Harbors to respond to a release on the Polar Pipeline on a 24-hour basis. Clean Harbors has the equipment necessary to properly respond to a Worst Case Discharge (WCD) on the Pipeline. Summit Midstream does not own or maintain any company-owned response equipment.

A Tier 1 (12 hr) response from Clean Harbors will be dispatched from the Williston, ND office. If the incident requires additional resources, Clean Harbors will respond from the Cannon Falls and Denver locations in a Tier 2 (36 hr) and Tier 3 (60 hr) timeframe.

Transfer hoses, connections equipment, portable pumps and all other pertinent equipment is available are loaded on quick response trailers. Vacuum trucks and portable storage equipment are available to receive oil from the pipeline and Clean Harbors has authorized facilities in which to dispose of the oil if necessary.

Clean Harbors – 24 Hour	800-645-6265
Clean Harbors – Williston Service Center	701-774-2201

*Refer to the following pages for a complete listing of equipment at the Williston, ND location.

800.645.8265 (800.OIL.TANK) – 24-HR WORLDWIDE EMERGENCY RESPONSE NUMBER

NORTH DAKOTA SERVICE CENTER	48° 10' 35.48" N 103° 37' 43.85" W	24-Hr. #	800.645.8265
310 Airport Rd. Suite 500/600		24-Hr. #	701.774.2201
Williston, ND 58801		Fax #	

Ralph Vicente, General Manager

EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Ralph Vicente
Virgil Blanchard
Stephen Sheppard

40-Hour OSHA Trained Personnel:

Supervisor	4
Foreman	2
Equipment Operator	8
Field Technician	25

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat	NDSC	1860CCJ / 18 Ft. / # V423	1	Y	Y	N	N
Power Workboat	NDSC	1860CCJ / 18 Ft. / # V421	1	Y	Y	N	N
Landing Craft	NDSC	LCM / 28 Ft. / # V364	1	Y	Y	N	N
Boat Trailer	NDSC	BT421, BT419	2	Y	Y	N	N
Vessel Transport Trailer	NDSC	CH742	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Mobile Command Trailer	NDSC	6202	1	Y	Y	N	N
High Powered Vacuum Truck/Cusco	NDSC	JDS5226, JDS4868, JDS5240, JDS5234, 7910771	5	Y	Y	N	N
Cyclone Vactor/Guzzler	NDSC	4188, 4256	2	Y	Y	N	N
Straight Box Trucks	NDSC	4305, 4262	2	Y	Y	N	N
6 Wheel Dump Truck	NDSC	United Rental (1168637)	1	Y	Y	N	N
Trailer (Skid Vac)	NDSC	CH2157	1	Y	Y	N	N
Crew Cab Pickup	NDSC	8791, 8957, 8531, 8533, 80076	5	Y	Y	N	N
Roll-off frames	NDSC	CH552, CH595, CH633, CH634, 2334T, 4294, CH2328, United Rentals (1201088)	7	Y	Y	N	N
Vacuum Tanker	NDSC	5,000 gallon	1	Y	Y	N	N
Tractor with Side Dump Trailer	NDSC	42'	5	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Hot water Hotsy	NDSC		2	Y	Y	N	N
Vactor Hose	NDSC		200'	Y	Y	N	N
Discharge Hose	NDSC	6"	500'	Y	Y	N	N
Discharge Hose	NDSC	4"	1000'	Y	Y	N	N

800.645.8265 (800.OIL.TANK) – 24-HR WORLDWIDE EMERGENCY RESPONSE NUMBER

(4) Oil Spill Containment Booms				
Oil Containment Boom	NDSC	8" Yellow Slide Pin	10000'	Y Y N Y
(5) Environmental Monitoring Equipment				
MSA Gas Indicator	NDSC	Sirius 5 Gas	1	Y Y N N
Draeger Pump	NDSC	Gas Tech	2	Y Y N N
(6) Recovery Equipment				
Skidmount Vacuum Unit	NDSC	CH2157	1	Y Y N N
Drum Skimmer	NDSC		2	Y Y N Y
Vac Box Containers	NDSC		16	Y Y N Y
Roll-Off Containers	NDSC		13	Y Y N N
Drums	NDSC	55 Gallon	88	Y Y N N
Totes	NDSC	250 Gallon	12	Y Y N N
(7) Beach or Earth Cleaning and Excavating Equipment				
Backhoe	NDSC	John Deere 410	1	Y Y N N
(8) Generators / Compressors / Light Towers				
Sullair Portable Compressor	NDSC	185 Diesel	5	Y Y N N
Winco Generator	NDSC	K4800/A	3	Y Y N N
Coppus Blower	NDSC	4" Pneumatic	3	Y Y N N
Coppus Blower	NDSC	8" Pneumatic	1	Y Y N N
Coppus Blower	NDSC	10" Pneumatic	1	Y Y N N
Coppus Fan	NDSC	RF-20	2	Y Y N N
(9) Health and Safety Equipment				
MSA S.C.B.A.	NDSC	1 Hour/4500	10	Y Y N N
Spare Air Cylinders	NDSC	4500 PSI (1 HR)	8	Y Y N N
MSA SAR	NDSC	Pressure Demand	4	Y Y N N
MSA Escape Units	NDSC	5 Minutes	7	Y Y N N
Mustang Suits	NDSC	Foul Weather PFD	6	Y Y N N
Breathing Air Hose	NDSC		400'	Y Y N N
Hydraulic Hose	NDSC		800'	Y Y N N
Personal Floatation Devices	NDSC		40	Y Y N N
PFD Survival Suits	NDSC		6	Y Y N N
(10) Communications				
(11) Miscellaneous				
Outboard Motor	NDSC	Yamaha	2	Y Y N N
UTV	NDSC	Polaris Ranger 4-Seater	2	Y Y N N

SECTION 4 RESPONSE ACTIVITIES

4.1 Operations Personnel Responsibilities

Operations Personnel	
1	Shut down pipeline operations to minimize the volume of released material as soon as possible.
2	Alert other people in the area of the situation and to any potential dangers caused by the release. Contact the local Sheriff if necessary to prevent personnel from entering affected area.
3	Determine the source and identify of the material. (Any response actions should be attempted only if safe and personnel are properly trained)
4	Fill out Spill Report Information Form (Section 2) and report observations to the Dispatcher and the supervisor(s) of the affected facility.
5	Standby to answer questions or perform tasks as directed by the Qualified Individual.

4.2 Qualified Individual Responsibilities

Qualified Individual	
1	Assume company authority (On-Scene Coordinator) and authorize the use of company funds for response.
2	Notify OSRO of the spill and mobilize personnel and equipment based on forecasted response.
3	Notify the Spill Management Team.
4	Notify local agencies of risks associated with spill.
5	Notify federal and state agencies as appropriate.
6	Assure safety procedures are in place and being followed.
7	Work with Agency personnel (Federal On-Scene Coordinator and State On-Scene Coordinator) to bring them up to date on the response and efficiently and cooperatively respond to spill.

4.3 Oil Spill Response Organization (OSRO)

Summit Midstream has a Master Service Agreement (MSA) with Clean Harbors to respond to a release on the Epping Area Pipelines on a 24-hour basis. Clean Harbors has the equipment necessary to properly respond to a Worst Case Discharge (WCD) on the Pipeline. Summit Midstream does not own or maintain any company-owned response equipment.

A Tier 1 (12 hr) response from Clean Harbors will be dispatched from the Williston, ND office. If the incident requires additional resources, Clean Harbors will respond from the Cannon Falls and Denver locations in a Tier 2 (36 hr) and Tier 3 (60 hr) timeframe.

Transfer hoses, connections equipment, portable pumps and all other pertinent equipment is available are loaded on quick response trailers. Vacuum trucks and portable storage equipment are available to receive oil from the pipeline and Clean Harbors has authorized facilities in which to dispose of the oil if necessary.

Clean Harbors – 24 Hour	800-645-6265
Clean Harbors – Williston Service Center	701-774-2201

*Refer to the following pages for a listing of equipment and trained personnel available from OSRO.

TIER 1 RESPONSE RESOURCES

800.645.8265 (800.OIL.TANK) – 24-HR WORLDWIDE EMERGENCY RESPONSE NUMBER

NORTH DAKOTA SERVICE CENTER	48° 10' 35.48" N 103° 37' 43.85" W	24-Hr. #	800.645.8265
310 Airport Rd. Suite 500/600		24-Hr. #	701.774.2201
Williston, ND 58801		Fax #	

Ralph Vicente, General Manager

EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Ralph Vicente
Virgil Blanchard
Stephen Sheppard

40-Hour OSHA Trained Personnel:

Supervisor	4
Foreman	2
Equipment Operator	8
Field Technician	25

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat	NDSC	1860CCJ / 18 Ft. / # V423	1	Y	Y	N	N
Power Workboat	NDSC	1860CCJ / 18 Ft. / # V421	1	Y	Y	N	N
Landing Craft	NDSC	LCM / 28 Ft. / # V364	1	Y	Y	N	N
Boat Trailer	NDSC	BT421, BT419	2	Y	Y	N	N
Vessel Transport Trailer	NDSC	CH742	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Mobile Command Trailer	NDSC	6202	1	Y	Y	N	N
High Powered Vacuum Truck/Cusco	NDSC	JDS5226, JDS4868, JDS5240, JDS5234, 7910771	5	Y	Y	N	N
Cyclone Vactor/Guzzler	NDSC	4188, 4256	2	Y	Y	N	N
Straight Box Trucks	NDSC	4305, 4262	2	Y	Y	N	N
6 Wheel Dump Truck	NDSC	United Rental (1168637)	1	Y	Y	N	N
Trailer (Skid Vac)	NDSC	CH2157	1	Y	Y	N	N
Crew Cab Pickup	NDSC	8791, 8957, 8531, 8533, 80076	5	Y	Y	N	N
Roll-off frames	NDSC	CH552, CH595, CH633, CH634, 2334T, 4294, CH2328, United Rentals (1201088)	7	Y	Y	N	N
Vacuum Tanker	NDSC	5,000 gallon	1	Y	Y	N	N
Tractor with Side Dump Trailer	NDSC	42'	5	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Hot water Hotsy	NDSC		2	Y	Y	N	N
Vactor Hose	NDSC		200'	Y	Y	N	N
Discharge Hose	NDSC	6"	500'	Y	Y	N	N
Discharge Hose	NDSC	4"	1000'	Y	Y	N	N

800.645.8265 (800.OIL.TANK) – 24-HR WORLDWIDE EMERGENCY RESPONSE NUMBER

(4) Oil Spill Containment Booms				
Oil Containment Boom	NDSC	8" Yellow Slide Pin	10000'	Y Y N Y
(5) Environmental Monitoring Equipment				
MSA Gas Indicator	NDSC	Sirius 5 Gas	1	Y Y N N
Draeger Pump	NDSC	Gas Tech	2	Y Y N N
(6) Recovery Equipment				
Skidmount Vacuum Unit	NDSC	CH2157	1	Y Y N N
Drum Skimmer	NDSC		2	Y Y N Y
Vac Box Containers	NDSC		16	Y Y N Y
Roll-Off Containers	NDSC		13	Y Y N N
Drums	NDSC	55 Gallon	88	Y Y N N
Totes	NDSC	250 Gallon	12	Y Y N N
(7) Beach or Earth Cleaning and Excavating Equipment				
Backhoe	NDSC	John Deere 410	1	Y Y N N
(8) Generators / Compressors / Light Towers				
Sullair Portable Compressor	NDSC	185 Diesel	5	Y Y N N
Winco Generator	NDSC	K4800/A	3	Y Y N N
Coppus Blower	NDSC	4" Pneumatic	3	Y Y N N
Coppus Blower	NDSC	8" Pneumatic	1	Y Y N N
Coppus Blower	NDSC	10" Pneumatic	1	Y Y N N
Coppus Fan	NDSC	RF-20	2	Y Y N N
(9) Health and Safety Equipment				
MSA S.C.B.A.	NDSC	1 Hour/4500	10	Y Y N N
Spare Air Cylinders	NDSC	4500 PSI (1 HR)	8	Y Y N N
MSA SAR	NDSC	Pressure Demand	4	Y Y N N
MSA Escape Units	NDSC	5 Minutes	7	Y Y N N
Mustang Suits	NDSC	Foul Weather PFD	6	Y Y N N
Breathing Air Hose	NDSC		400'	Y Y N N
Hydraulic Hose	NDSC		800'	Y Y N N
Personal Floatation Devices	NDSC		40	Y Y N N
PFD Survival Suits	NDSC		6	Y Y N N
(10) Communications				
(11) Miscellaneous				
Outboard Motor	NDSC	Yamaha	2	Y Y N N
UTV	NDSC	Polaris Ranger 4-Seater	2	Y Y N N

TIER 2 & 3 RESPONSE RESOURCES

CANNON FALLS, MN SERVICE CENTER	44.53 N 92.91 W	24-Hr. # 507.263.0200
211 Holiday Ave		24-Hr. # 800.645.8265
Cannon Falls, MN 55009		Fax # 507.263.0252

Jared Nerison, General Manager

EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Jared Nerison
Joseph Wilcox
Jennifer Tamte

40-Hour OSHA Trained Personnel:

Foreman 3
Field Technician 7
Equipment Operator 5

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat, Alweld	Cannon Falls	17', 25 HP, AWLCO525H708, V321	1	Y	Y	N	N
Workboat, TMG	Cannon Falls	12', BUJ65295H809, V346	1	Y	Y	N	N
Workboat	Cannon Falls	21' 135 HP, V328	1				
(2) Motor Vehicles & Vacuum Equipment							
Crew Cab Pickup	Cannon Falls	F250/Equivalent 8956, 80822, xxx, xxx	4	Y	Y	N	N
Rack Truck	Cannon Falls	F450, 21,000 lb #5433	1	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Cold water pressure washer	Cannon Falls	3800 psi	2	Y	Y	N	N
Hot water pressure washer	Cannon Falls	4000 psi CH544	3	Y	Y	N	N
Skid Mount/ With Pressure Washer	Cannon Falls	500 gallons, Not Assigned yet	1	Y	Y	N	N
Cusco	Cannon Falls	3000 gallon, 7910771	1	Y	Y	N	N
3" DD Pump	Cannon Falls	Poly and Steel	2	Y	Y	N	N
2" DD Pump	Cannon Falls	Poly and Steel	3	Y	Y	N	N
(4) Oil Spill Containment Booms							
Oil Containment Boom	Cannon Falls	18", Mix, on Trailer	1000	Y	Y	N	Y
Oil Containment Boom	Cannon Falls	18", Mix, in storage	900	Y	Y	N	Y
Oil Containment Boom	Cannon Falls	6", Mix, in storage	300	Y	Y	N	Y
(5) Environmental Monitoring Equipment							
5-Gas Meter	Cannon Falls	LEL/02/CO/H2S/PID Sirius	3	Y	Y	N	N
Lumex	Cannon Falls	RA-915	1	Y	Y	N	N
(6) Recovery Equipment							
Drum Skimmers	Cannon Falls	Crucial 1D18P-24, 24 gpm capacity	2	Y	Y	N	N
(7) Beach or Earth Cleaning and Excavating Equipment							
Skid Loader	Cannon Falls	John Deere 320	1	Y	Y	N	N
(8) Generators / Compressors / Light Towers							
Generator	Cannon Falls	4000 Watt	4	Y	Y	N	N
Compressor	Cannon Falls	185 CFM Pull Behind	2	Y	Y	N	N

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(9) Health and Safety Equipment				
SCBA	Cannon Falls	2216 PSI	4	Y Y N N
SAR 4 Way Manifold	Cannon Falls		2	Y Y N N
SAR Regulators	Cannon Falls		1	Y Y N N
SAR w/5 minute egress	Cannon Falls		2	Y Y N N
Air Line	Cannon Falls	Breathing Air	400	Y Y N N
APR Full Face	Cannon Falls	Stock	8	Y Y N N
Tri Pod/Winch	Cannon Falls	75' Cable	1	Y Y N N
(10) Trailers				
ER Trailers	Cannon Falls	14' Enclosed Spill Trailer CH634 CH552	3	Y Y N N
Boom Trailer	Cannon Falls	16' Open	1	Y Y N N
Flat Bed Trailer	Cannon Falls	16' Open	1	Y Y N N
(11) Miscellaneous				
Vacuum Hose	Cannon Falls	2" chemical vacuum hose	350	Y Y N N
Vacuum Hose	Cannon Falls	3&4" chemical vacuum hose	200	Y Y N N
Floor Scubbing Attachment	Cannon Falls	Hydro attachment for the Pressure Washer	1	Y Y N N
Guzzler	Cannon Falls	3,000 gallon Straight with Highrail	1	Y Y N N
Guzzler	Cannon Falls	3,000 gallon Straight 4256	1	Y Y N N
Roll off Truck	Cannon Falls	Single Straight Frame 4205	1	Y Y N N

DENVER, CO FIELD SERVICES	39.783452 LAT. / -104.863841 LON.	24-Hr. #	303.371.1 100
4721 IRONTON STREET, UNIT B Denver, CO 80239		24-Hr. #	800.645.8265
		Fax #	303.371.1516

Brian Biancavilla, Field Services General
Manager

EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Brian Biancavilla
David Hadjes
Kenton Schuh

40-Hour OSHA Trained Personnel:

Supervisor	3
Foreman	2
Field Technician	4
Equipment Operator	3
Site Safety Officer	1

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Motor Vehicles & Vacuum Equipment							
Vacuum Truck Straight	Denver	3,000 gal.	1	Y	Y	N	N
High Powered Vacuum Loader, Cusco	Denver	3,000 gal / 10 cu. yd.	1	Y	Y	N	N
Box Truck	Denver	24'	1	Y	Y	N	N
Crew Cab Pickup	Denver	1/2 Ton & 3/4 Ton (ALL ARE 4 X 4)	4	Y	Y	N	N
Spill Trailer	Denver	18'	1	Y	Y	N	N
Roll Off Truck	Denver	Straight Truck	1	Y	Y	N	N
Rack Truck / Stakebed	Denver	14' Bed	1	Y	Y	N	N
Equipment List Cont.							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(2) Pumps and Pressure Equipment							
Wilden Diaphragm Pump	Denver	2"	1	Y	Y	N	N
Wilden Diaphragm Pump	Denver	3"	1	Y	Y	N	N
Hotsy on Trailer	Denver	3,000 PSI - Hot Water Pressure Washer	1	Y	Y	N	N
ALKOTA on Trailer	Denver	5,000 PSI - Hot Water Pressure Washer	1	Y	Y	N	N
Honda Trash Pump	Denver	3" - Gasoline Powered Suction Pump	1	Y	Y	N	N

(3) Oil Spill Containment Booms							
Oil Containment Boom	Denver	American Marine 18", In Garage Bldg.	150'	Y	Y	N	N
(4) Environmental Monitoring Equipment							
MSA Gas Indicator	Denver	Sirius Multi-Gas Indicator	2	Y	Y	N	N
Gastec Sample Pump	Denver	Hand Pump for Specific Chemical Compounds	2	Y	Y	N	N
(5) Recovery Equipment							
Skim Pak	Denver	2" Floating Skimmer	1	Y	Y	N	Y
CH & E	Denver	2" Skimmer Pump	1	Y	Y	N	Y
(6) Beach or Earth Cleaning and Excavating Equipment							

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Equipment List Cont.				
(7) Generators / Compressors / Light Towers				
Generator	Denver	5000 Watt	1	Y Y N N
(8) Health and Safety Equipment				
CSE Entry Gear	Denver	Tripod, MSA	2	Y Y N N
Coppus Blower	Denver	36" Pneumatic	1	Y Y N N
Coppus Blower	Denver	Electric	1	Y Y N N
Type C Supplied Air Rig with Escape Bottle	Denver	MSA	4	Y Y N N
SCBA	Denver	MSA	3	Y Y N N
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A T P D
(9) Communications				
Portable Cellular Telephones	Denver		9	Y Y N N
Vehicle-Mounted CB	Denver	Mounted in Each Commercial Vehicle	4	Y Y N N
(11) Miscellaneous				
Emergency Response Subcontractors				

4.4 Oil Removal Recovery Techniques

NATURAL RECOVERY

Objective	No attempt is made to remove any stranded oil, when there is no effective method for cleanup or to minimize impact to the environment. Oil is left to degrade naturally.
Description	No action is taken, although monitoring of contamination areas is required.
Applicable Habitat Types	All habitat types.
When to Use	When natural removal rates are fast (e.g., gasoline evaporation or high energy coastlines), when the degree of oiling is light, access is severely restricted or dangerous to cleanup crews, or when cleanup actions will do more harm than natural removal.
Biological Constraints	This method may be inappropriate for areas used by high numbers of mobile animals (birds, marine mammals) or endangered species.
Environmental Effects	Same as from the oil alone.
Waste Generation	None.

BARRIERS / BERMS

Objective	To prevent entry of oil into a sensitive area or to divert oil to a collection area.
Description	A physical barrier other than a boom is placed across an area to prevent oil from passing. Barriers can consist of earthen berms or filter fences. When it is necessary for water to pass because of water volume, underflow or overflow dams are used.
Applicable Habitat Types	At the mouths of creeks or streams to prevent oil from entering from offshore, or to prevent oil from being released from the creek into offshore waters. Also, on beaches where a high berm can be built above the high-tide line to prevent oil from over-washing the beach and entering a sensitive back-beach habitat (e.g. lagoon).
When to Use	When the oil threatens sensitive habitats and other barriers are not feasible. To protect sensitive areas when cleaning adjacent shorelines
Biological Constraints	Responders must minimize disturbance to sensitive areas, such as shorebird nesting sites on beaches. Placement of dams and filter fences could cause excessive physical disruptions to the site, particularly in wetlands.
Environmental Effects	May disrupt or contaminate sediments and adjacent vegetation. The natural beach or shore profile should be restored (may take weeks to months on gravel beaches).
Waste Generation	Sediment barriers will become contaminated on the oil side and filter fence materials will have to be disposed of as oily wastes.

PHYSICAL HERDING

Objective	To free any oil trapped in debris or vegetation on-water; to direct the movement of floating oil towards containment and recovery devices; or to divert oil away from sensitive areas.
Description	Plunging water jets, water or air hoses, and propeller wash can be used to dislodge trapped oil and divert or herd it to containment and recovery areas. May emulsify the oil. Mostly conducted from small boats.
Applicable Habitat Types	In near shore areas where there are little or no currents, and in and around man-made structures such as wharves and piers. In streams where oil is trapped by debris.
When to Use	In low-current or stagnant water bodies, to herd oil towards recovery devices. In high current situations to divert floating oil away from sensitive areas, or dislodge oil from debris.
Biological Constraints	When used near shore and in shallow water, must be careful to not disrupt bottom sediments or submerged aquatic vegetation.
Environmental Effects	May generate high levels of suspended sediments and mix them with the oil, resulting in deposition of contaminated sediments in benthic habitats
Waste Generation	None.

MANUAL OIL REMOVAL / CLEANING

Objective	To remove oil with hand tools and manual labor.
Description	Removal of surface oil with hands, rakes, shovels, buckets, scrapers, sorbents, pitchforks, etc, and placing in containers. No mechanized equipment is used. Includes underwater recovery of submerged oil by divers with hand tools, for example.
Applicable Habitat Types	Can be used on all habitat types.
When to Use	Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses that can be picked up manually. Also can be used in areas where roosting or birthing animals cannot or should not be disturbed.
Biological Constraints	Foot traffic over sensitive areas (wetlands, tidal pools, etc.) should be restricted or prevented. There may be periods when shoreline access should be avoided, such as during bird nesting.
Environmental Effects	Minimal, if surface disturbance by crew movement and waste generation is controlled.
Waste Generation	May generate significant quantities of oil mixed with sediment which must be properly disposed of or treated. Decontamination of hand tools may produce oily wastewater that must be treated properly. Worker personal protective gear is usually disposed of daily or decontaminated and the resulting oily wastewater treated properly.

MECHANICAL OIL REMOVAL

Objective	To remove oil from shorelines and bottom sediments with mechanical equipment.
Description	Oil and oiled sediments are collected and removed using mechanical equipment such as backhoes, graders, bulldozers, dredges, draglines, etc. Requires systems for temporary storage, transportation and final treatment and disposal.
Applicable Habitat Types	On land, wherever surface sediments are both amenable to and accessible to heavy equipment. For submerged oil, used in sheltered areas where oil accumulates. On water, used on viscous to solid oil.
When to Use	When large amounts of oiled materials must be removed. Care should be taken to remove sediments only to the depth of oil penetration, which can be difficult when using heavy equipment. Should be used carefully where excessive sediment removal may cause erosion.
Biological Constraints	Heavy equipment may be restricted in sensitive habitats (e.g. wetlands, soft substrate) or areas containing endangered species. Will need special permission to use in areas with known cultural resources. Dredging in sea grass beds or coral reef habitats may be prohibited. The noise generated by the mechanical equipment may also be a constraint.
Environmental Effects	The equipment is heavy, with may support personnel required. May be detrimental if excessive sediments are removed without replacement. All organisms in the sediments will be affected, although the need to remove the oil may make this response method the best overall alternative. Re-suspension of exposed oil and fine-grained oil sediments can affect adjacent bodies of water.
Waste Generation	Can generate significant quantities of contaminated sediment that must be cleaned or land filled. The amount of waste generated by this cleanup option should be given careful consideration by response planners when reviewing potential environmental impacts of the oily wastes, debris and residues.

SORBENTS

Objective	To remove surface oil by absorption onto oleophilic (oil-attracting) material placed in water or at the waterline.
Description	Sorbent material is placed on the floating oil or water surface to allow it to absorb oil, or alternatively, the material can be used to wipe or dab stranded oil. Forms include sausage boom, pads, rolls, sweeps, snares, and loose granules or particles. These products can be either synthetic or natural substances. Efficacy depends on the capacity of the particular sorbent, energy available for lifting oil off the substrate, and stickiness of the oil. Recovery of all sorbent material is mandatory. Loose particulate sorbents must be contained in a mesh or other material.
Applicable Habitat Types	Can be used on any habitat or environment type.
When to Use	When oil is free-floating close to shore or stranded on shore. The oil must be able to be released from the substrate and absorbed by the sorbent. Often used as a secondary treatment method after gross oil removal and in sensitive areas where access is restricted. Selection of sorbent varies by oil type; heavy oils only coat surfaces, requiring a high surface area to be effective, whereas lighter oils can penetrate sorbent material.
Biological Constraints	Access for deploying and retrieving sorbents should not be through soft or sensitive habitats or affect wildlife. Sorbent use should be monitored to prevent overuse and generation of large volumes of waste. Sorbent should not be used in a fashion that would endanger or trap wildlife. Sorbents left in place too long can break apart and present an ingestion hazard to wildlife.
Environmental Effects	Physical disturbance of habitat during deployment and retrieval. Improperly deployed or tended sorbent material can crush or smother sensitive substrates.
Waste Generation	Sorbents must eventually be collected for proper disposal so care should be taken to select and use sorbents properly, and prevent generation of large amounts of lightly-oiled sorbents. Recycling should be emphasized rather than disposal.

VACUUM

Objective	To remove oil pooled on a shoreline substrate or sub tidal sediments
Description	A vacuum unit is attached via a flexible hose to a suction head that recovers free oil. The equipment can range from small, portable units that fill individual 55-gallon drums to large super suckers that are truck or vessel mounted and can generate enough suction to lift large rocks.
Applicable Habitat Types	Any accessible habitat type. May be mounted on barges for water-based operations, on trucks driven to the recovery area, or hand-carried to remote sites.
When to Use	When oil is stranded on the substrate, concentrated in trenches or trapped in vegetation. Usually requires shoreline access points.
Biological Constraints	Special restrictions should be established for areas where foot traffic and equipment operation may be damaging, such as soft substrates. Operations in wetlands need to be very closely monitored, with a site-specific list of restriction developed to prevent damage to vegetation.
Environmental Effects	Minimal, if foot and vehicular traffic is controlled and minimal substrate is damaged or removed.
Waste Generation	Collected oil and or oil/water mix will need to be stored temporarily prior to recycling or disposal. Large amounts of water are often recovered, requiring separation and treatment.

DEBRIS REMOVAL

Objective	To remove contaminated debris from the shoreline or water surface.
Description	Manual or mechanical removal of debris from the shore or water surface. Can include cutting and removal of oiled logs.
Applicable Habitat Types	Can be used on any habitat or environment type where access is safe.
When to Use	When driftwood and debris are heavily contaminated and provide a potential source of chronic oil release. When it may create aesthetic problems, be a source of contamination for other resources in the area, because clogging problems in the skimmer, or create safety problems for responders. Used in areas of debris accumulation on beaches prior to oiling to minimize the amount of oiled debris to be handled.
Biological Constraints	Foot traffic over sensitive areas (wetlands, spawning grounds) needs to be restricted. May be periods when access should be restricted (spawning periods, influx of large numbers of migratory water birds).
Environmental Effects	Physical disruption of substrate, especially when mechanized equipment must be deployed to recover a large quantity of debris.
Waste Generation	Will generate contaminated debris (volume depends on what, and how much, is collected, e.g. logs, brush). Unless there is an approved hazardous waste incinerator that will take oily debris, burning will seldom be allowed, especially on-site burning. However, this option should still be explored, especially for remote locations, with the appropriate state or federal agencies who must give approvals for burning.

SEDIMENT REWORKING / TILLING

Objective	To enhance the rate of degradation, by breaking up oily sediments and surface oil deposits, increasing the surface area, and mixing deep subsurface oil layers to the surface.
Description	The oiled sediments are roto-tilled, disked, or otherwise mixed using mechanical equipment or manual tools. Along beaches, oiled sediments may also be pushed to the water's edge (surf washing) to enhance natural cleanup by wave activity. The process may be aided with high-volume flushing of gravel.
Applicable Habitat Types	On any sedimentary substrate that can support mechanical equipment or foot traffic.
When to Use	On sand to gravel beaches with subsurface oil, where sediment removal is not feasible (due to erosion or disposal problems). On sand beaches where the sediment is stained or lightly oiled. Appropriate where oil is stranded above normal high waterline.
Biological Constraints	Avoid use on shores near sensitive wildlife habitat, such as fish spawning areas or bird-nesting or concentration areas because of the potential for release of oil and oiled sediments into adjacent bodies of water. Should not be used in shellfish beds.
Environmental Effects	Due to the mixing of oil into sediments, this method could further expose organisms that live below the original layer of oil. Repeated mixing over time could delay re-establishing organisms. Re-floating oil from treated sites could contaminate adjacent areas.
Waste Generation	None.

VEGETATION CUTTING / REMOVAL

Objective	To remove portions of oiled vegetation or oil trapped in vegetation to prevent oiling of wildlife or secondary oil release.
Description	Oiled vegetation is cut with weed wackers, blades, etc., and picked or raked up and bagged for disposal.
Applicable Habitat Types	Habitats composed of vegetation such as wetlands, sea grass beds, and kelp beds.
When to Use	When the risk of oiled vegetation contaminating wildlife is greater than the value of the vegetation that is to be cut, and there is no less-destructive method that removes or reduces the risk to acceptable standards.
Biological Constraints	Operations must be strictly monitored to minimize the degree of root destruction and mixing of oil deeper into the sediments. Access in bird nesting areas should be restricted during nesting seasons. Cutting only the oiled portions of the plants and leaving roots and as much of the stem as possible minimizes impact to plants.
Environmental Effects	Vegetation removal will destroy habitat for many animals. Cut areas will have reduced plant growth, and in some instances, plants may be killed. Cutting at the base of the plant stem may allow oil to penetrate into the substrate, causing subsurface contamination. Along exposed sections of shoreline, the vegetation may not recover, resulting in erosion and habitat loss. Trampled areas will recover much more slowly.
Waste Generation	Cut portions of oiled plant must be collected and disposed.

FLOODING

Objective	To wash oil stranded on the land surface to the water's edge for collection.
Description	A perforated header pipe or hose is placed above the oiled shore or bank. Ambient temperature water is pumped through the header pipe at low pressures and flows down slope to the water. On porous sediments, water flows through the substrate, pushing loose oil ahead of it, or floating oil to the water's surface and transporting the oil down the slope for pickup. On saturated, fine-grained sediments, the technique becomes more of a flushing of the surface.
Applicable Habitat Types	All shoreline types where the equipment can be effectively deployed. Not effective in steep inter-tidal areas.
When to Use	In heavily oiled areas when the oil is still fluid and adheres loosely to the substrate, and where oil has penetrated into gravel sediments. This method is frequently used with other washing techniques (low or high pressure, cold-to-hot water flushing).
Biological Constraints	Special care should be taken to recover oil where near shore habitats contain rich biological communities. Not appropriate for muddy substrates.
Environmental Effects	Habitat may be physically disturbed by foot traffic during operations and smothered by sediments washed down the slope. Oiled sediment may be transported to shallow near shore areas, contaminating them and burying benthic organisms.
Waste Generation	Depends on the effectiveness of the collection method.

LOW-PRESSURE AMBIENT-WATER FLUSHING

Objective	To remove fluid oil that has adhered to the substrate or man-made structures, pooled on the surface, or become trapped in vegetation.
Description	Ambient-temperature water is sprayed at low pressures (<10 psi), usually from hand-held hoses, to lift oil from the substrate and direct it to the water's edge for recovery by skimmers, vacuum, or sorbents. Can be used with a flooding system to prevent released oil from re-adhering to the substrate downstream of the treatment area.
Applicable Habitat Types	On substrates, riprap, and solid man-made structures, where the oil is still fluid. In wetlands and along vegetated banks where oil is trapped in vegetation.
When to Use	Where fluid oil is stranded onshore or floating on shallow inter-tidal areas.
Biological Constraints	May need to restrict use so that the oil/water effluent does not drain across sensitive inter-tidal habitats and mobilized sediments do not affect rich sub tidal communities. Use from boats will reduce the need for foot traffic in soft substrates and vegetation. Flushed oil must be recovered to prevent further oiling of adjacent areas.
Environmental Effects	If containment methods are not sufficient, oil and oiled sediments may be flushed into offshore areas. Some trampling of substrate and attached biota will occur
Waste Generation	Depends on the effectiveness of the collection method.

HIGH-PRESSURE AMBIENT-WATER FLUSHING

Objective	To remove oil that has adhered to hard substrates of man-made structures.
Description	Similar to low-pressure flushing except that water pressure is 100-1,000 psi. High-pressure spray will more effectively remove sticky or viscous oils. If low-water volumes are used, sorbents are placed directly below the treatment area to recover oil.
Applicable Habitat Types	On bedrock, man-made structures, and gravel substrates.
When to Use	When low-pressure flushing is not effective at removing adhered oil that must be removed to prevent continued oil release or for aesthetic reasons. When a directed water jet can remove oil from hard-to-reach sites.
Biological Constraints	May have to restrict flushing so that the oil does not drain across sensitive habitats. Flushed oil must be recovered to prevent further oiling of adjacent areas.
Environmental Effects	Attached animals and plants in the direct spray zone will be removed. May drive oil deeper into the substrate or erode shorelines of fine sediments if water jet is improperly applied. If containment methods are not sufficient, oil and oiled sediments may be flushed into offshore areas. Some trampling of substrate and attached biota will occur.
Waste Generation	Depends on the effectiveness of the collection method.

LOW-PRESSURE, HOT-WATER FLUSHING

Objective	To remove non-fluid oil that has adhered to the substrate or man-made structures, or pooled on the surface.
Description	Hot water (90°F up to 170°F) is sprayed with hoses at low pressures (<10 psi) to liquefy and lift oil from the substrate and direct it to the water's edge for recovery by skimmers, vacuums or sorbents. Used with flooding to prevent released oil from re-adhering to the substrate.
Applicable Habitat Types	On bedrock, sand to gravel substrates, and man-made structures.
When to Use	Where heavy, but relatively fresh oil is stranded onshore. The oil must be heated above its pour point, so it will flow. Less effective on sticky oils.
Biological Constraints	Avoid wetlands or rich inter-tidal communities so that hot oil/water effluent does not contact sensitive habitats. Operations from boats will help reduce foot traffic in soft substrates and vegetation. Flushed oil must be recovered to prevent further oiling of adjacent areas.
Environmental Effects	Hot water contact can kill all attached animals and plants. If containment methods are not sufficient, oil may be flushed into downstream areas. Some trampling of substrate and biota will occur.
Waste Generation	Depends on the effectiveness of the collection method.

HIGH-PRESSURE HOT-WATER FLUSHING

Objective	To mobilize weathered and viscous oil strongly adhered to surfaces.
Description	Hot water (90°F up to 171°F) is sprayed with hand-held wands at pressures greater than 100 psi (720 kpa). If used without water flooding, this procedure requires immediate use of vacuum or sorbents to recover the oil/water runoff. When used with a flooding system, the oil is flushed to the water surface for collection by skimmers, vacuum, or sorbents.
Applicable Habitat Types	Gravel substrates, bedrock and man-made structures.
When to Use	When oil has weathered to the point that warm water at low pressure no longer effectively removes oil. To remove viscous oil from man-made structures for aesthetic reasons.
Biological Constraints	Use should be restricted so that the oil/water effluent does not drain across sensitive habitats (damage can result from exposure to oil, oiled sediments, and hot water). Should not be used directly on attached algae nor rich, inter-tidal areas. Released oil must be recovered to prevent further oiling of adjacent areas.
Environmental Effects	All attached animals and plants in the direct spray zone will be removed or killed, even when used properly. Oiled sediment may be transported to shallow near shore areas, contaminating them and burying benthic organisms.
Waste Generation	Depends on the effectiveness of the collection method.

STEAM CLEANING

Objective	To remove heavy residual oil from solid substrates or man-made structures.
Description	Steam or very hot water (171°F to 212°F) is sprayed with hand-held wands at high pressure (2000+ psi). Water volumes are very low compared to flushing methods.
Applicable Habitat Types	Man-made structures such as seawalls and riprap.
When to Use	When heavy oil residue must be removed for aesthetic reasons, and when hot-water flushing is not effective and no living resources are present.
Biological Constraints	Not to be used in areas of soft substrates, vegetation, or high biological abundance directly on, or below, the structure.
Environmental Effects	Complete destruction of all organisms in the spray zone. Difficult to recover all released oil.
Waste Generation	Depends on the effectiveness of the collection method. Usually sorbents are used, generating significant waste volumes.

SAND BLASTING

Objective	To remove heavy residual oil from solid substrates or man-made structures.
Description	Use of sandblasting equipment to remove oil from the substrate. May include recovery of used (oiled) sand in some cases.
Applicable Habitat Types	On heavily oiled bedrock, artificial structures such as seawalls and riprap.
When to Use	When heavy oil residue must be cleaned for aesthetic reasons, and even steam cleaning is not effective.
Biological Constraints	Not to be used in areas of soft substrate, vegetation or high-biological abundance directly below or adjacent to, the structures.
Environmental Effects	Complete destruction of all organisms in the blast zone. Possible smothering of downstream organisms. Un-recovered, used sand will introduce oiled sediments into the adjacent habitat.
Waste Generation	Will need to recover and dispose of oiled sand used in blasting.

EMULSION-TREATING AGENTS

Objective	To break or destabilize emulsified oil into separate oil and water phases. Can be used to prevent emulsion formation, increasing oil recovery rates, extending the window for dispersant application, or making burning possible.
Description	Emulsion-treating agents are surfactants that are applied to emulsified oil at low concentrations (0.1-2 percent). They can be injected into skimmer reservoirs to break the emulsion as it is skimmed from the water. They can be sprayed (similar to dispersants) directly onto slicks to break or prevent emulsions, although this type of application has not been used operationally.
Applicable Habitat Types	On all water environments where emulsified oil is present.
When to Use	Where storage capabilities are very limited, to separate the recovered, emulsified oil and water so that the water can be treated and discharged. On floating slicks, where emulsified oil can reduce skimmer efficiency.
Biological Constraints	There is insufficient information to evaluate biological constraints.
Environmental Effects	Because this is a new method, there are few data available to evaluate environmental effects. Effective dosages are one to two orders of magnitude lower than dispersants. Environmental concerns include the potential for increased oil content of separated water; whether the oil will be more readily dispersed; and how the treated oil will behave upon contact with skimming equipment, birds, mammals and shorelines.
Waste Generation	May enable recycling of oil/water mixtures by breaking down emulsions.

ELASTICITY MODIFIERS

Objective	To impart visco-elastic properties to floating oil, thereby increasing skimming rates.
Description	The product is applied as liquid, slurry, or solid onto the oil. Some mixing is required and is usually provided by the water spray during applications. Treated oil is rendered visco-elastic (gelatinous or semi-solid), but still fluid; there is no chemical change in the oil. The primary purpose is to increase skimmer efficiency removal rates while minimizing water recovery amounts. Increases the efficiency of some skimmers, but may clog other skimmers and pumps.
Applicable Habitat Types	On all water environments where oil can be contained for skimming. Not for use near wetlands nor debris because of increased adhesive properties of the treated oil.
When to Use	When skimmer efficiency is low. Must be used with booming or other physical containment. Not for use on heavy oils, which are already highly viscous.
Biological Constraints	Not suitable for vegetated shores or where there is extensive debris mixed in the oil. Should be avoided when birds or other wildlife cannot be kept away from the treated oil.
Environmental Effects	May increase the smothering effect of oil on organisms; therefore, the treatment should be considered only when recovered of the treated oil is likely.
Waste Generation	If skimming efficiency is increased, will reduce the volume of water in oil/water collections. Effects on recycling of oil treated with elasticity modifiers is unknown.

HERDING AGENTS

Objective	To collect or herd oil into a smaller area and thicker slick in order to increase recovery. Can be used to herd oil away from sensitive areas or to help keep oil contained when it is necessary to move a boom.
Description	These agents, which are insoluble surfactants and have a high spreading pressure, are applied in small quantities (1-2 gallons per lineal mile) to the clean water surrounding the edge of a fresh oil slick. They contain the oil, prevent spreading, but do not hold the spill in place. Hand-held or vessel-mounted systems can be used. Must be applied early in spill, when oil is still fluid.
Applicable Habitat Types	On all still water environments.
When to Use	Potential use for collection and protection. For collection, used to push slicks out from under docks and piers where it has become trapped, or in harbors where the equipment is readily accessible for use early in the spill. For protection in low-current areas, use to push slicks away from sensitive resources such as wetlands. Not effective in fast currents, rough seas, or rainfall.
Biological Constraints	Not suitable for use in very shallow water or fish-spawning areas.
Environmental Effects	Direct acute toxicity to surface-layer organisms possible, though available products vary greatly in the aquatic toxicity.
Waste Generation	Same as for manual oil recovery.

SOLIDIFIERS

Objective	To change the physical state of spilled oil from a liquid to a solid.
Description	Chemical agents (polymers) are applied to oil at rates of 10-45 percent or more, solidifying the oil in minutes to hours. Various broadcast systems, such as leaf blowers, water cannons, or fire suppression systems, can be modified to apply the product of large areas. Can be applied to both floating and stranded oil.
Applicable Habitat Types	All water environments, bedrock, sediments and artificial structures.
When to Use	When immobilization of the oil is desired, to prevent refloating from a shoreline, penetration into the substrate, or further spreading. However, the oil may not fully solidify unless the product is well mixed with the oil, and may result in a mix of solid and untreated oil. Generally not used on heavy oil spills which are already viscous.
Biological Constraints	Must be able to recover all treated material.
Environmental Effects	Available products are insoluble and have very low aquatic toxicity. Un-recovered solidified oil may have longer impact because of slow weathering rates.
Waste Generation	If skimming efficiency is increased, solidifiers may reduce the volume of water collected during oil recovery. Effects on recycling oil treated with solidifiers are unknown. Most solidifier producers state that treated oil can pass leachate tests, allowing disposal in landfills.

SHORELINE CLEANING AGENTS (SURFACE WASHING AGENTS)

Objective	To increase the efficiency of oil removal from contaminated substrates.
Description	Special formulations are applied to the substrate, as a presoak and /or flushing solution, to soften or lift weathered or heavy oils from the substrate to enhance flushing methods. The intent is to lower the water temperature and pressure required to mobilize the oil from the substrate during flushing. Some agents will disperse the oil as it's washed off the beach, others will not.
Applicable Habitat Types	On any habitat where water flooding and flushing procedures are applicable.
When to Use	When the oil has weathered to the point where it cannot be removed using ambient water temperatures and low pressures. This approach may be most applicable where flushing effectiveness decreases as the oil weathers.
Biological Constraints	When the product does not disperse the oil into the water column, the released oil must be recovered from the water surface. Use may be restricted where suspended sediment concentrations are high, near wetlands, and near sensitive near shore resources.
Environmental Effects	The toxicity and effects on dispersability of treated oil vary widely among products. Selection of a product should consider the toxicity of the product.
Waste Generation	Because treated oil must be recovered, waste generation is a function of recovery method, which often includes sorbents.

NUTRIENT ENRICHMENT (BIO-STIMULATION)

Objective	To accelerate the rate of oil hydrocarbon degradation due to natural microbial processes using a form of bioremediation that adds nutrients (generally nitrogen and phosphorus) that stimulate microbial growth.
Description	If nutrients are a limiting factor (as mentioned using the interstitial pore water) in an area where shoreline oiling has occurred, water-soluble nutrients can be applied by a spray irrigation system. Nutrients should be applied daily if the impacted area gets completely submerged by tides and waves and if maximum bio-stimulation is desired. If the impacted area gets submerged only during spring tides, the frequency of nutrient addition will be determined by the inter-tidal zone water coverage. Using slow-release granular or encapsulated nutrients or oleophilic fertilizer (which adheres to the oil residue on the surface_ should require less frequent addition, by time-series monitoring of interstitial pore water nutrient levels is needed to ensure target levels are being maintained, especially throughout the depth of the impacted inter-tidal zone.
Applicable Habitat Types	Any shoreline habitat type where access is allowed and nutrients are deficient.
When to Use	On moderate to heavy oiled substrates, after other techniques have been used to remove free product on lightly-oiled shorelines, where other techniques are destructive or ineffective; and where nutrients limit natural attenuation. Most effective on light to medium crude oils and fuel oils (asphaltenes tend to inhibit rapid bio-degradation). Less effective where oil residues are thick. Not considered for gasoline spills, which evaporate rapidly.
Biological Constraints	Avoid using ammonia-based fertilizers at highly elevated concentrations because unionized ammonia is toxic to aquatic life. Nitrate is an equally good nitrogen source, minus the toxicity. Sodium tripolyphosphate is a better phosphorus source than orthophosphates because it is more soluble in seawater. If nutrients are applied properly with adequate monitoring, eutrophication should not be a problem. Only nutrient additives proven to be nontoxic and effective in either the laboratory or the field should be used in the environment. Contact toxicity of oleophilic nutrients may restrict their use as other chemicals in the product could be more toxic to aquatic organisms in the presence of oil.
Environmental Effects	Detrimental effects to shoreline from foot or vehicle traffic caused by workers applying nutrients (unless nutrients are sprayed from a vessel or aircraft).
Waste Generation	None.

NATURAL MICROBE SEEDING (BIO-AUGMENTATION)

Objective	<p>To accelerate natural microbial degradation of oil by using a form of bioremediation that adds high numbers of oil-degrading microorganisms.</p>
Description	<p>Formulations containing specific hydrocarbon-degrading microbes are added to the oiled area because indigenous hydrocarbon degraders are low in number, or those that are present cannot degrade the oil effectively. Since microbes require nitrogen and phosphorus to convert hydrocarbons to biomass, formulations containing these oil degraders must also contain adequate nutrients.</p> <p>Research studies conducted with bioengineered organisms or organisms enriched from different environments, grown in the laboratory to high numbers, and applied to an oiled beach to stimulate rapid bio-degradation, have failed to prove conclusively that seeding is effective.</p> <p>Bio-augmentation appears less effective than bio-stimulation because: 1) hydrocarbon degraders are ubiquitous in nature and, when an oil spill occurs at a given site, the influx of oil will cause an immediate increased response in the hydrocarbon degrading populations; but 2) if nutrients are in limited supply, the rate of oil degradation will be less than optimal; thus 3) supplying nutrients will enhance the process initiated by the spill, but adding microorganisms will not, because they still lack the necessary nitrogen and phosphorus to support growth.</p>
Applicable Habitat Types	There is insufficient information on impact or effectiveness of this method to make a judgment on applicable habitat.
When to Use	There is insufficient information on impact of effectiveness of this method to make a judgment on when to use it.
Biological Constraints	Avoid using products containing ammonia-based fertilizers at elevated concentrations because un-ionized ammonia is toxic to aquatic life. Nitrate is an equally good a nitrogen source, minus the toxicity. If the protect containing nutrients is applied properly with adequate monitoring, eutrophication should not be a problem; but toxicity tests should be evaluated carefully, as other chemicals in the product could be toxic to aquatic organisms.
Environmental Effects	Detrimental physical effects to shoreline from foot or vehicle traffic caused by workers applying bio-augmentation products (unless nutrients are sprayed from a vessel or aircraft).
Waste Generation	None.

IN-SITU BURNING

Objective	To remove oil from the water surface or habitat by burning it in place.
Description	Oil floating on the water surface is collected into slicks at least 2-3 mm thick and ignited. The oil can be contained in fire-resistant booms, or by natural barriers such as ice or the shore. On land, oil can be burned when it is on a combustible substrate such as vegetation, logs and other debris. Oil can be burned from non-flammable substrates using a burn promoter. On sedimentary substrates, it may be necessary to dig trenches for oil to accumulate in pools to a thickness that will sustain burning. Heavy oils are hard to ignite but can sustain a burn. Emulsified oils may not ignite nor sustain a burn when the water content is greater than 30 or 50 percent.
Applicable Habitat Types	On most habitats except dry muddy substrates where heat may impact the biological productivity of the habitat. May increase oil penetration into permeable substrates. Use in marshes should be undertaken using special precautions. Not suitable for woody vegetation such as mangroves and hardwood swamps.
When to Use	On land, where there is heavy oil in sites neither amenable nor accessible to physical removal and it is important to remove the stranded oil quickly. In wetlands and mud habitats, a water layer will minimize impacts to sediments and roots. Many potential applications for spills in ice. There are many operational and public health limitations.
Biological Constraints	The possible effect of smoke on wildlife and populated areas should be evaluated.
Environmental Effects	Temperature and air quality effects are likely to be localized and short-lived. Toxicological impacts from burn residues have not been evaluated. On-water burn residues are likely to sink. On land, removal of residues is often necessary for crude and heavy oils. Limited data on burning oiled wetlands indicate recovery of wetland vegetation will depend on season of burn, type of vegetation, and water level in the marsh at time of burn.
Waste Generation	Any residues remaining after burning will need to be collected and land filled, but with an efficient burn will be a small fraction of the original oil volume.

4.5 Booming Locations

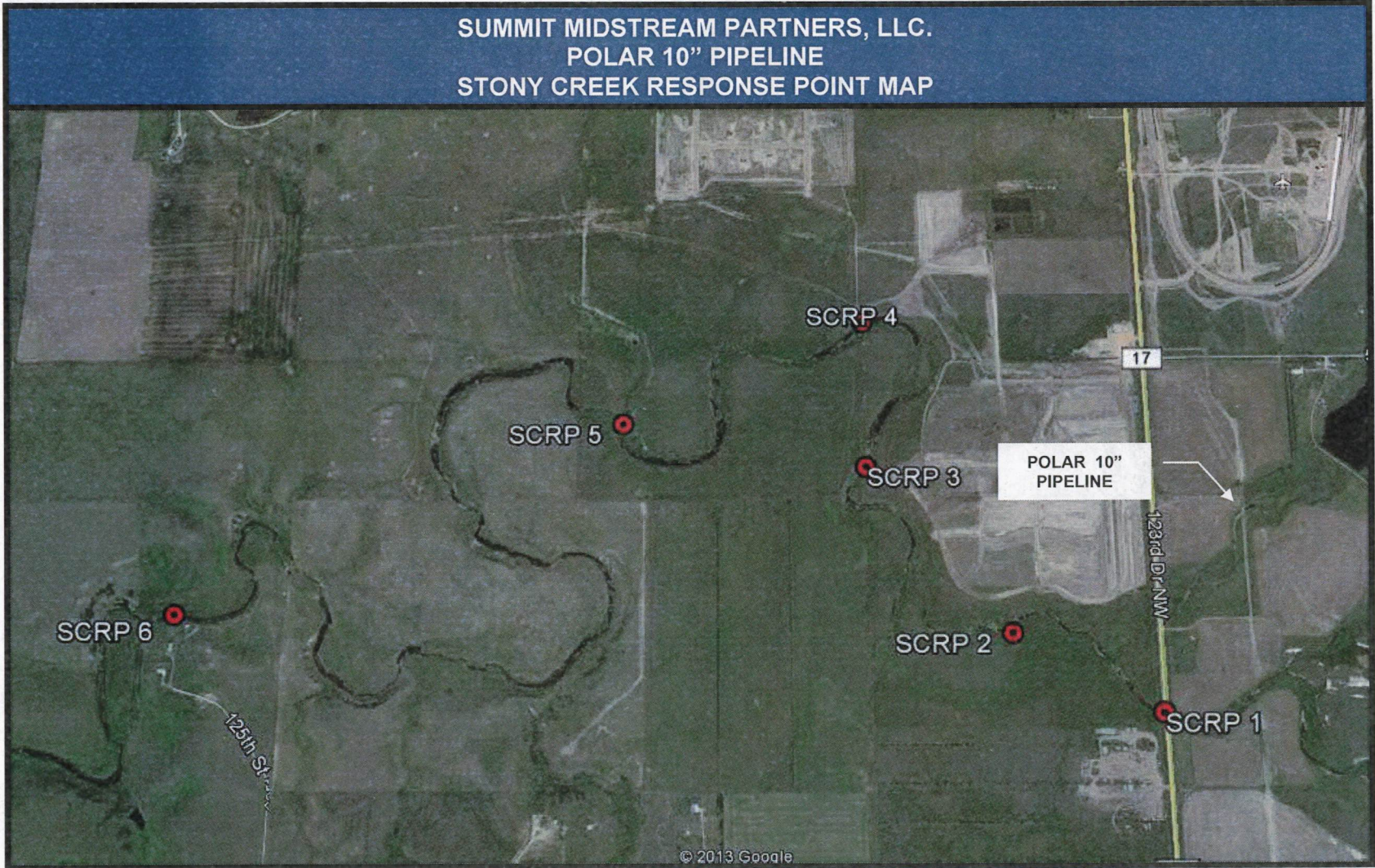
Polar 10" Pipeline

A Worst Case Discharge from the Polar 10" Pipeline would enter Stony Creek and travel westward toward Epping Dam Lake. Summit has identified booming and collection points along Stony Creek to prevent spilled material from traveling downstream and impacting Epping Dam Lake. Points were determined by ease of access for vacuum trucks and equipment.

Stony Creek Response Points

#	Location Description	Latitude	Longitude
1	123 rd Ave. NW Crossing	48° 15' 40.05"	103° 21' 21.78"
2	Approx. 24 miles west of 123 rd St NW*	48° 15' 47.01"	103° 21' 41.16"
3	Approx. .5 miles west of 123 rd St NW*	48° 16' 02.34"	103° 22' 00.33"
4	Approx. .5 miles west of 123 rd St NW*	48° 16' 16.21"	103° 22' 00.21"
5	Approx. .9 miles west of 123 rd St NW*	48° 16' 06.52"	103° 22' 33.32"
6	Approx. 1.7 miles west of 123 rd St NW*	48° 15' 49.20"	103° 23' 33.09"

* Distance represent direct linear miles from 123rd St. NW



Polar 6" Pipeline

A Worst Case Discharge from the Polar 6" Pipeline would enter Chris Creek and travel southeastward toward Lake Sakakawea. Summit has identified booming and collection points along Chris Creek to prevent spilled material from traveling downstream and impacting Lake Sakakawea. Points were determined by ease of access for vacuum trucks and equipment.

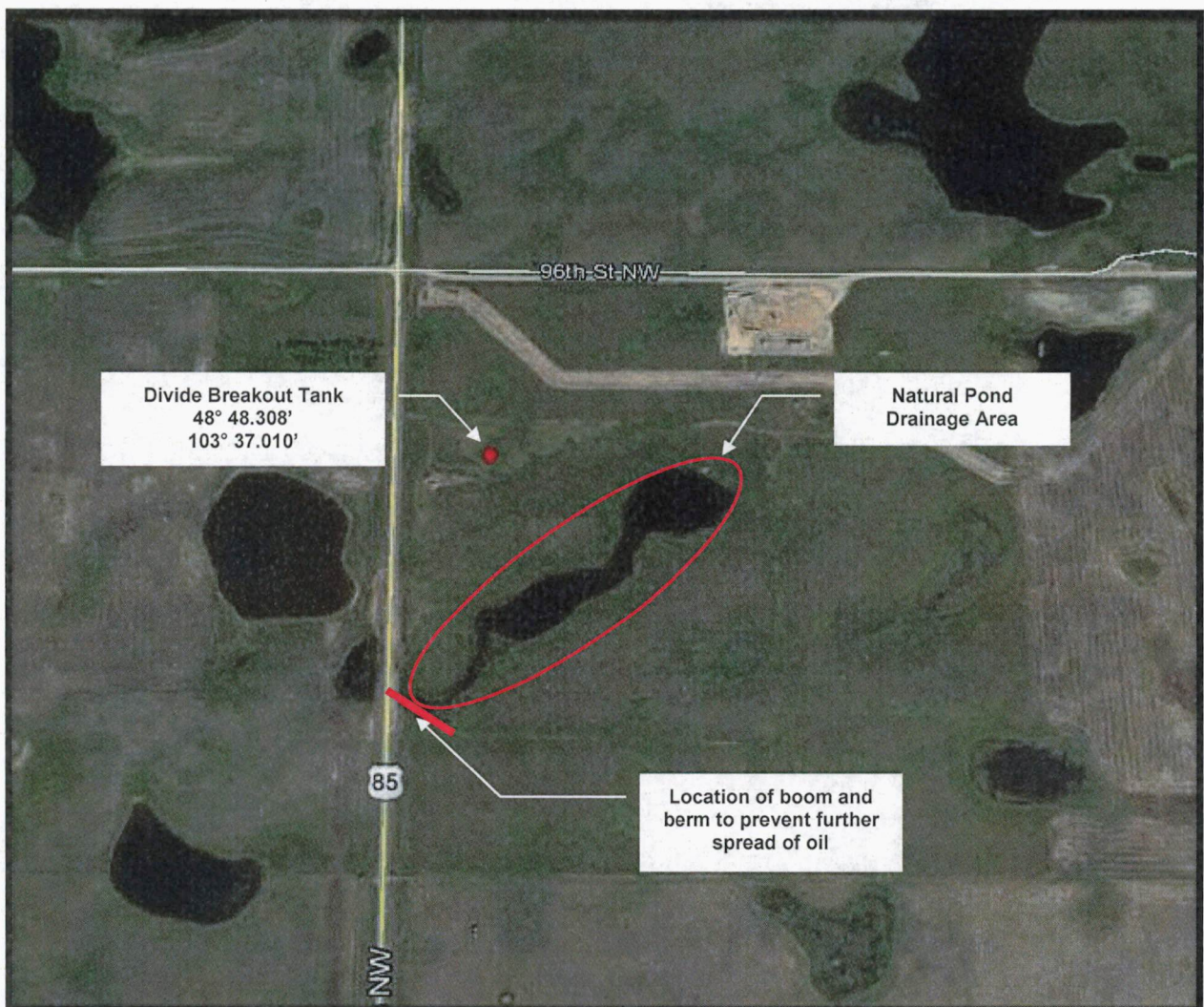
Chris Creek Response Points

#	Location Description	Latitude	Longitude
1	122 rd Ave. NW Crossing	48° 06' 32.97"	103° 19' 27.99"
2	Pond Collection Point	48° 06' 24.24"	103° 18' 58.09"
3	Pond Collection Point	48° 06' 16.33"	103° 18' 44.94"
4	Farm Road Access Point	48° 05' 55.76"	103° 18' 28.01"
5	Large Pond Collection Point	48° 05' 52.79"	103° 17' 54.67"
6	Farm Road Access Point	48° 05' 58.13"	103° 16' 51.59"
7	119 th Rd NW Crossing	48° 05' 53.77"	103° 15' 36.55"



Divide 8" Pipeline Breakout Tank

A Worst Case Discharge from the Divide 8" Pipeline Breakout Tank would be contained inside the tank firewall (secondary containment). If a breach of the firewall occurred, the spill would enter the natural pond immediately south of the Breakout Tank. In a flood situation, the release would travel south down the side of highway 85 and enter one of the other ponds adjacent to the highway. Response for the release would be to contain the oil in the initial pond and prevent the travel south to the adjacent properties. Containment boom and heavy equipment would be used to create a barrier to prevent further travel. Skimmers and vacuum trucks would be used to remove free oil from the pond.



4.6 Disposal

Storage Devices - Spill response operations can quickly generate large volumes of waste. Completing arrangements for the permanent disposition of wastes may require a great deal of time that could delay recovery operations. Therefore, facilities for the temporary storage of waste should be provided. There are many temporary storage operations that will meet operations requirements, including commercial products specifically designed for oil spill response, general-purpose devices, and containers-of-opportunity.

<p>The selection of appropriate storage devices and methods is based on the type and volume of material to be stored. The following factors should be considered.</p>	• Storage Location
	• Storage Capacity Required
	• Type of Material to Be Stored
	• Degree of permanence
	• Method of Disposal

The following table lists options for storage of wastes and debris associated with the oil spill cleanup operations and the appropriate timeframe for their use.

TYPE OF STORAGE	ESTIMATED TIMEFRAME FOR USE
Air Berm	Initial (days)
Container of Opportunity	Temporary (weeks)
Deck Barge with Deck Tanks	Temporary (weeks)
Drum 55-Gallon	Initial (days) – Temporary (weeks)
Dumpster (roll-off container)	Temporary (weeks) – Semi-permanent (months)
Dump truck (lined)	Initial (days)
Earthen Dike	Initial (days)
Earthen Pit	Initial (days)
Flexible, Towable Tank/Bladder	Temporary (weeks)
Heavy Duty Plastic Trash Bag	Initial (days) - Temporary (weeks)
Oilfield Tank	Semi-permanent (months)
Open-top barge, lash barge, or hopper barge	Temporary (weeks)
Pickup Truck (lined)	Initial (days) – Temporary (weeks) in Containers
Pillow Tank	Initial (days) – Temporary (weeks)
Plastic Swimming Pool	Initial (days)
Plastic Tubing	Initial (days)
Prefabricated Kit	Initial (days) – Temporary (weeks)
Production Facility	Temporary (weeks)
Skimmer Vessel	Initial (days)
Small Boat	Initial (days)
Supply Boat with Deck Tanks	Temporary (weeks)
Tank Barge	Temporary (weeks) – Semi-permanent (months)
Tanker	Semi-permanent (months)
Tank Truck	Temporary (weeks)
Vacuum or Air Conveyor Truck	Initial (days) – Temporary (weeks)

Disposal Methods

Non-oily wastes that are generated during cleanup operations can be disposed at local wastewater treatment plants and municipal landfills. Operations for disposing of oiled and hazardous wastes (subject to regulatory requirements include):	• Industrial Landfill
	• Landfarms
	• Open Burning
	• Portable Incineration
	• Commercial Incineration
	• Reprocessing
	• Reclaiming / Recycling

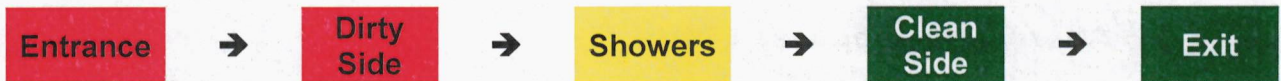
Transportation

Transportation of waste oil is subject to regulation. Usually, these must comply with regulations that stipulate a symbol and number that properly identify the material. Placards must be clearly visible from the back and sides of the vehicle. Permits may also be required for such vehicles as well as manifests that indicate the material being transported. A transportation contingency plan may be part of the regulatory requirements that includes emergency contacts product data, and spill cleanup procedures.

Equipment	Use
Dump Trucks	Removal of Oiled Material
Vacuum Trucks	Removal of Pooled Liquid
Garbage Cans	Removal of Oiled Material
Flatbed Trucks	Removal of Oiled Material
Liners	Lining Storage Containers
Protective Clothing	Personal Protection
Incinerators	Burning of Oiled Materials
Pumps / Hoses / Connectors	Transfer

Decontamination

Personnel involved in any oil spill cleanup operation can get very dirty. It is important to keep oily gear and dirty personnel out of the berthing facilities in order to maintain satisfactory living conditions. One way to do this is to set up personnel decontamination facilities for workers coming off the job. This includes showers and lockers for workers to change into clean clothes as well as facilities for cleaning and storing soiled rain gear and rubber boots. A typical design of a decontamination facility can be set up as follows:



Decontamination capability must be provided in all responses and should address personnel, vessels, and equipment. Only approved cleaning chemicals should be used:

Personnel Decontamination	Personnel decontamination will be required throughout the response effort. Personnel decontamination units can be fabricated on site or commercial modular units may be leased or purchased.
Vessel Decontamination	Boats will accumulate oil on their hulls at and near the waterline. Soiled boats should not be brought into uncontaminated harbors without first being cleaned.
Equipment Decontamination	Boat hulls may be manually washed from a low-freeboard pontoon float in a temporary slip constructed inside a protected, boomed-off area.
Equipment Decontamination	Small skimmers may be pressure-washed while being suspended over a wash pit.
Equipment Decontamination	Equipment decontamination will be necessary as soon as equipment is moved through or to uncontaminated areas. This is especially evident as contaminated boom is moved from containment to protection or storage; or when cleanup equipment is moved from one area to another.

Investigation

A thorough investigation of the spill cause, cleanup activities, cost incurred and Spill Management System will be conducted by the Incident Commander and/or his designee following all response activities. A report will be prepared, discussed internally and submitted within Unified Command (if requested).

4.7 Alternative Response Strategies

Summit will consult with Clean Harbors, the State On-scene Coordinator and the Federal On-scene Coordinator about the possible use of alternative response strategies (specifically dispersants and in-situ burning). If the use of alternative response strategies looks like a feasible option, the procedure for obtaining Federal and State permission for use will be immediately implemented. The pipeline is onshore and is not in a pre-approved area for dispersants. The procedure for obtaining permission is listed below:

1. Determine the feasibility of alternative response strategies for the spill area with State and Federal Officials.
2. Develop an action plan for the use of the alternative response strategies at the spill area.
3. Submit the request for authorization to the RRT and the State, along with the required information listed in the Application\Checklist form.

Expedited Decision for Dispersant Use

An expedited approval process (EAP) for dispersant use or other chemicals will not apply to the Polar Pipeline. A spill on the Polar Pipeline will likely impact sensitive areas in and around the river immediately unlike a near shore area as the EAP was designed for. If the spill is discovered prior to entering a water source, Summit will use mechanical methods to prevent it from entering the water.

SECTION 5 CONTACT LIST

5.1 Qualified Individual(s)

Name	Address	24-Hr Phone
John Carter Biffle	1101 Fourth St. SE, Suite 201 Stanley, ND 58784	701-641-6218
Joe Velasquez	2657 Aero Drive Grand Prairie, TX 75052	505-360-5740

5.2 Company Contacts

EMERGENCY CONTACT INFORMATION – INTERNAL

Summit Operations Communications Center (SOCC) / Operations Monitoring Center (OMC)			
	SOCC/OMC Emergency	SOCC/OMC Non- emergency	Email
All Regions	888-643-7929 214-462-7714 214-462-7715	n/a	SOCC@summitmidstream.com
Gary Martinez (Dir., SOCC)	832-413-4775	713-309-5602	gmartinez@summitmidstream.com
Corporate and Field Offices			
	Phone	Fax	Address
Corporate Offices	--	--	--
Atlanta	770-504-5000	770-504-5005	2300 Windy Ridge Pkwy, Suite 240 South Atlanta, GA 30339
Dallas (HQ)	214-242-1955	214-242-1972	2100 McKinney Ave, Suite 1250 Dallas, TX 75201
Denver	720-452-6220		999 18 th Street, Suite 2400 Denver, CO 80202
Houston	832-413-4770	832-413-4780	1450 Lake Robbins Drive, Suite 300 The Woodlands, TX 77380
Field Offices	--	--	--
Fruita	970-858-3425	970-440-1019	1950 Hwy 6 & 50 Fruita, CO 81521
Grand Prairie	n/a	n/a	2771 South Great Southwest Pkwy, Unit A Grand Prairie, TX 75052



CONTACT LIST

Rangely	701-500-2189	n/a	101 East Main Street Rangely, CO 81648
Rifle	970-440-1000	970-440-1019	2128 Railroad Avenue, Suite 106 Rifle, CO 81650
Stanley	701-264-3617	n/a	1101 Fourth Street SE, Suite 201 Stanley, ND 58784
Vernal	n/a	n/a	1385 East 1300 South Vernal, UT 84078
Executives			
	Office	Cell	Email
Brock Degeyter (SVP; General Counsel)	214-462-7705	214-789-4464	bdegeyter@summitmidstream.com
Rene Casadaban (SVP, EC&O - SW)	832-460-7939	832-729-7919	rcasadaban@summitmidstream.com
Jesse Wood (SVP, EC&O – Rockies)	770-452-6230	303-885-5559	jwood@summitmidstream.com
Regional Directors – Operations			
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Dakota Lee	214-462-7717	214-415-7660	dlee@summitmidstream.com
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	Office	Cell	Email
Zach Jacobson	970-440-1044	970-987-2528	zjacobson@summitmidstream.com
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Jack Chamberlain	n/a	214-697-4399	jchamberlain@summitmidstream.com
Cliff Webb	304-566-3188	304-844-8364	cwebb@summitmidstream.com
Carter Biffle	701-264-3613	701-641-6218	cbiffle@summitmidstream.com
Health, Safety, Environmental, & Regulatory			
	Office	Cell	Email
Jeff Stoolman (Dir. Of Safety)	832-413-4779	832-728-1477	jstoolman@summitmidstream.com
Matt Stratmann (Dir. Regulatory)	n/a	832-610-6657	mstratmann@summitmidstream.com
Andrew Parisi (Dir. Environmental)	206-420-7084	303-406-1678	aparisi@summitmidstream.com
Ian Spahr (Mgr, Safety)	701-264-3612	701-264-3612	ispahr@summitmidstream.com
Eric Stockbridge (Mgr. Regulatory)	214-462-7707	214-763-7397	estockbridge@summitmidstream.com
Tarik Ibrahim (HSE&R Field Coordinator)	720-358-3846	303-917-2781	tibrahim@summitmidstream.com



**CONTACT
LIST**

Operations			
	Office	Cell	Email
Joe Velasquez (VP, Operations)	214-242-1967	505-360-5740	jvelasquez@summitmidstream.com
David Algeo (Dir, Compression)	970-440-1005	970-987-4148	dalgeo@summitmidstream.com
Engineering			
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Tommy Janik (VP, Eng & Const, SW)	214-462-7703	214-212-8491	tjanik@summitmidstream.com
Mike Rose (VP, Eng & Const, RK)	214-242-1964	214-926-6299	mrose@summitmidstream.com
Charles Torres (VP, Facilities & Process Engineering, RK)	720-358-3849	720-724-3701	ctorres@summitmidstream.com
Brandon Anderson (Mgr, Eng & Ops Support)	214-242-1965	214-364-4799	banderson@summitmidstream.com
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Tommie Coleman (Sched.)	832-608-6131	832-948-9174	tcoleman@summitmidstream.com
Personnel			
See Company phone directory.			
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Megan Davis (Sr. Counsel; VP. Reg. Aff.)	214-462-7704	214-218-1639	mdavis@summitmidstream.com
Jeff Price (Atty.)	214-462-7708	469-475-9218	jprice@summitmidstream.com
Producer Relations			
	Office	Cell	Email
Ryan Simmons (VP, Corp. Dev., SW)	770-504-5002	404-423-3924	rsimmons@summitmidstream.com
Randy Roth (Dir. Corp. Dev.)	832-413-4764	281-728-8059	rroth@summitmidstream.com
John Millar (Dir. Corp. Dev.)	832-413-4766	713-962-5647	jmillar@summitmidstream.com
Marc Bokelman (VP, Corp. Dev., RK)	720-452-6236		mbokelman@summitmidstream.com

5.3 Insurance Representative

Name	

5.4 Response Resources Supplier (OSRO)

Name	Address	24-Hr Phone
Clean Harbors	2541 132nd C Avenue Arnegard, ND 58835US	800-645-8265

SECTION 6 TRAINING

6.1 Training

Operations Personnel

All operations personnel are trained for the following:

Responsibilities under this response plan,
Name and address of, and the procedure for contacting, the operator on a 24-hour basis, and
Name of, and procedures for contacting, the Qualified Individual (QI) on a 24-hour basis.

Reporting Personnel

All reporting personnel are trained for the following:

Content of the information summary of the response plan,
Toll-free telephone number of the National Response Center,
Notification process (both internal and external),

Company Response Personnel

All company response personnel are trained for the following:

Characteristics and hazards of the discharge,
Incident Command System,
HAZWOPER,
Conditions which are likely to worsen the emergency, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.
Steps necessary to control any accidental discharges and to minimize the potential for fire, explosion, toxicity, or environmental damage, and
Proper firefighting procedures and use of equipment, fire suits and breathing apparatus.

6.2 Training Records

Training records, for each individual that has been trained, are maintained at the Summit Stanley, ND Office and are kept for as long as that individual is assigned those duties.

SECTION 7 DRILLS

7.1 Drills

The Summit drill program is based on the Preparedness for Response Exercise Program (PREP) guidelines.

#	TYPE EXERCISE	TIMING	COMMENTS
1.	QI Notification	Quarterly	<ul style="list-style-type: none"> - Exercise communications between Facility personnel and QI (IC). - Contact by telephone, radio, message- pager, or fax with confirmation of receipt. - Must be conducted during <u>non-business</u> hours.
2.	Spill Management Team Table-Top Exercise	Annually	<ul style="list-style-type: none"> - Exercise the SMT's organization, communication, and decision making in spill managing a spill response. - Test 15 PREP components in 3-year period.
3.	Equipment Deployment – With OSRO Equipment Sited in Plan.	Annually	<ul style="list-style-type: none"> - Demonstrate the ability of the personnel to deploy and operate their response equipment. - Ensure the response equipment is in proper working order. - Representative sample = 1,000' each type boom, except bottom seal boom (50'). - Each type skimmer in each type operating environment. - Facility owner/operator ensures that OSRO identified in response plan provides adequate documentation that requirements for this exercise have been met.
	Equipment Deployment – Company Owned Equipment	Semi-Annually	<ul style="list-style-type: none"> - Demonstrate ability of facility personnel to deploy and operate equipment. - Ensure equipment is proper working order.
4.	Discharge Prevention Meetings	Annually	<ul style="list-style-type: none"> - Meetings should be held once each year to discuss new topics in Discharge Prevention Measures throughout the facility.
5.	Unannounced and Area Exercises	Periodically	<ul style="list-style-type: none"> - Unannounced and area SMT Table-Top-Exercises will be held on a periodic basis.

7.2 Records

Records of all drills/exercises will be maintained at Summit's Stanley, ND Office for a period of 5 years.

SECTION 8 PLAN REVIEW

8.1 Plan Review Matrix

Plan Review	<i>This plan will be reviewed at least once every 5 years.</i>	
	If a new or different operations condition of information that substantially affects the implementation of this response plan, Summit will immediately modify the response plan to address such changes. Examples of changes in operating conditions that would cause a significant change to the response plan are:	
	1	An extension of the existing pipeline or construction of a new pipeline or purchase of a pipeline in a response zone not covered by the previously approved plan;
	2	Relocation or replacement of the pipeline in a way that substantially affects the information included in the response plan, such as a change to the worst case discharge volume;
	3	The type of oil transported, if the type affects the required response resources, such as a change from crude oil to gasoline;
	4	The name of the oil spill removal organization (OSRO);
	5	Change in emergency response procedures;
	6	Change in Qualified Individual(s);
	7	A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities; and
	8	Any other information relating to circumstances that may affect full implementation of the plan.
9	Post-drill or post-incident results.	
Revision Distribution	All plan amendments / revisions will be prepared and submitted to PHMSA, as well as, each plan holder within 30 days after the required plan review.	

SECTION 9 RESPONSE ZONE APPENDIX

9.1 Qualified Individual

John Carter Biffle	Office:	N/A
	Mobile:	701-641-6218
	E-Mail:	Jbiffle@summitmidstream.com
	Office Address:	1101 Fourth Street SE, Suite 201 Stanley, ND 58784
Joe Velasquez	Office:	214-242-1967
	Mobile:	505-360-5740
	E-Mail:	JVelasquez@summitmidstream.com
	Office Address:	2657 Aero Drive Grand Prairie, TX 75052

9.2 QI Notification Procedures

Notification of the Qualified Individual(s) will be made by telephone, starting first with the office numbers, followed by mobile and then pagers, when applicable. Qualified Individuals are available 24-hours per day by one of the contact methods. Alternate methods of contacting the Qualified Individuals will be two-way radios when in close proximity and e-mail where available.

9.3 Spill Detection & Mitigation Procedures

The Pipeline Systems are protected by high/low pressure devices. The pipeline is monitored 24 hours per day by Summit main control center in Houston, Texas. The procedures used to prevent and quickly detect spills are described in the Operations and Maintenance Procedures Manual. In addition to the electronic monitoring system, leaks or ruptures are located by routine pipeline inspections. The Station Foreman is responsible for leak detection along the Pipelines.

Initial Detection	
1	Shut down pipeline operations to minimize the volume of released material as soon as possible.
2	Alert other people in the area of the situation and to any potential dangers caused by the release. Contact the local Sheriff if necessary to prevent personnel from entering affected area.
3	Determine the source and identify of the material. (Any response actions should be attempted only if safe and personnel are properly trained)
4	Fill out Spill Report Information Form (Section 2) and report observations to the Dispatcher and the supervisor(s) of the affected facility.
5	Standby to answer questions or perform tasks as directed by the Qualified Individual.

9.4 Oil Spill Response Organization (OSRO)

Clean Harbors – 24 Hour	800-645-6265
Clean Harbors – Williston Service Center	701-774-2201

9.5 Response Activities and Resources


Summit Midstream has a Master Service Agreement (MSA) with Clean Harbors to respond to a release on the Epping Area Pipelines on a 24-hour basis. Clean Harbors has the equipment necessary to properly respond to a Worst Case Discharge (WCD) on the Pipeline. Summit Midstream does not own or maintain any company-owned response equipment.


A Tier 1 (12 hr) response from Clean Harbors will be dispatched from the Williston, ND office. If the incident requires additional resources, Clean Harbors will respond from the Cannon Falls and Denver locations in a Tier 2 (36 hr) and Tier 3 (60 hr) timeframe.

Transfer hoses, connections equipment, portable pumps and all other pertinent equipment is available are loaded on quick response trailers. Vacuum trucks and portable storage equipment are available to receive oil from the pipeline and Clean Harbors has authorized facilities in which to dispose of the oil if necessary.


9.6 Agency Notifications

FEDERAL NOTIFICATIONS

	<p style="text-align: center; margin: 0;">NATIONAL RESPONSE CENTER</p> <p style="text-align: center; margin: 0;">• USCG HEADQUARTERS – WASHINGTON, D.C.</p>
24 Hour Phone	800-424-8802
<p>The NRC is the sole federal point of contact for reporting oil and chemical spills which enter or threaten to enter the navigable waters of the United States. If you have a spill to report, contact the NRC via the toll-free number or visit the NRC Web Site (http://www.nrc.uscg.mil) for additional information on reporting requirements and procedures. For those without 800 access, please contact the NRC at 202-267-2675.</p> <p>At the earliest practicable moment following the discovery of a release of hazardous liquid or carbon dioxide transported resulting in an event described in 195.50, the operator of the system must give notice (within 2 hours) if that release resulted in pollution of any stream, river, lake, reservoir or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines.</p>	

	<p style="text-align: center; margin: 0;">ENVIRONMENTAL PROTECTION AGENCY</p> <p style="text-align: center; margin: 0;">• REGION 8 – DENVER, CO</p>
Region 8 Spill Hotline	800-227-8914
<p>Calls to the National Response Center will automatically be forwarded to the appropriate EPA Regional Office. However, a courtesy notification can be made directly to the applicable region.</p> <p>The Environmental Protection Agency must be notified of the following:</p> <ol style="list-style-type: none"> 1. Any unanticipated bypass exceeding effluent limitation by permit. 2. Any upset condition, which exceeds any effluent limitation in permit. 3. Violation of maximum daily discharge limitation or daily minimum toxicity limitation. 4. Chemical spills of a reportable quantity. <p>Oral notification is required within 24 hours of the incident. No written report is required.</p>	

STATE NOTIFICATIONS

 NORTH DAKOTA DEPARTMENT of HEALTH	
24 Hour Phone	800-222-6362
<p>Any spill or discharge of waste which may cause pollution of waters of the state must be reported immediately (<u>NDAC 33-16-02.1-11 paragraph 4, bottom of page 22</u>). The owner, operator, or person responsible for a spill or discharge must notify the department as soon as possible (701.328.5210) or the North Dakota hazardous materials emergency assistance and spill reporting number (800.472.2121) and provide all relevant information about the spill. Depending on the severity of the spill or accidental discharge, the department may require the owner or operator to:</p> <ul style="list-style-type: none"> • Take immediate remedial measures; • Determine the extent of pollution to waters of the state; • Provide alternate water sources to water users impacted by the spill or accidental discharge; or • Any other actions necessary to protect human health and the environment. <p>Non-emergency releases may be reported by filling out the online Environmental Incident Report Form:</p> <p style="text-align: center;">https://www.dmr.nd.gov/oilgas/spills/eirform.asp</p>	

LOCAL NOTIFICATIONS

LOCAL AGENCIES - 911	
Agency	24-Hour
North Dakota Highway Department	701-577-4521
Williams County Sheriff & Law Enforcement Center	701-577-7707
Williston, ND Fire Department	701-572-3400
Epping, ND City Hall (Fire Department)	701-859-5561
Divide County Sheriff	701-965-6461
Divide County Emergency Management	701-965-6361

9.7 Worst Case Discharge Volume

Divide 8" Breakout Tank Worst Case Discharge	6,000 bbl
---	------------------

9.8 Worst Case Discharge Methodology

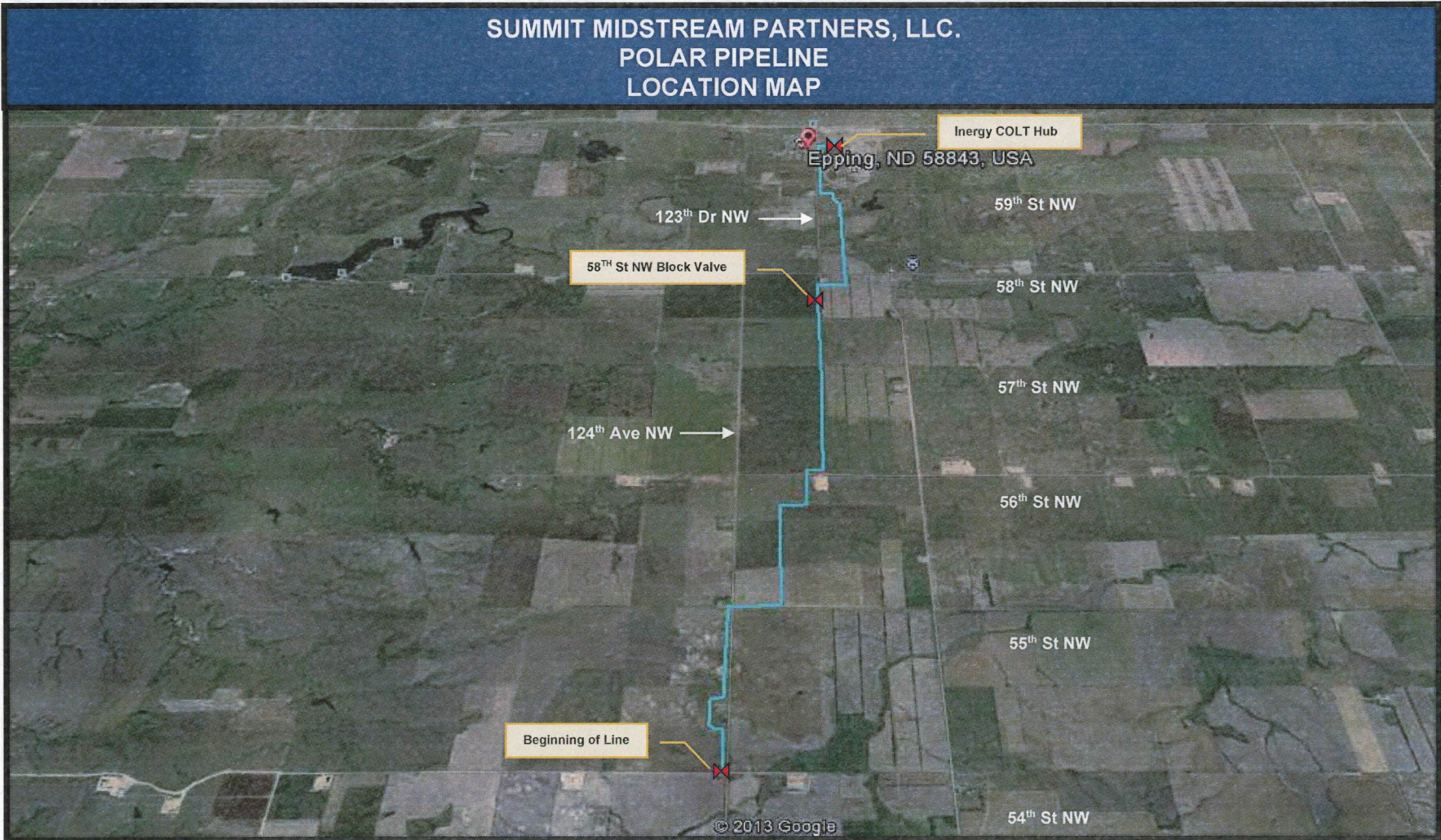
<p>The worst case discharge (WCD) would occur if the crude oil breakout tank at the Divide Facility had a release per 194.105. The following calculation takes into account adverse weather conditions:</p>		
Tank Capacity (bbl)	20,000	
Prevention Credits		%
Secondary Containment > 100%	Containment capacity is greater than 110% of the breakout tank capacity	50
Built to API Standards	Tank is built to API 653 Standards	10
Overfill Protection Standards	Tank has both a radar tank gauging system with high and high-high alarms and an independent high-high device that closes an MOV on incoming stream.	5
Testing/Cathodic Protection	Tank is cathodically protected and is inspected annually.	5
WCD Calculation	Tank Capacity: 20,000 - Prevention Credits: 14,000	
WCD Volume	6,000 Barrels	

WCD Methodology: Based on the WCD source comparison, the breakout tank posed the maximum drainage volume in the response zone.

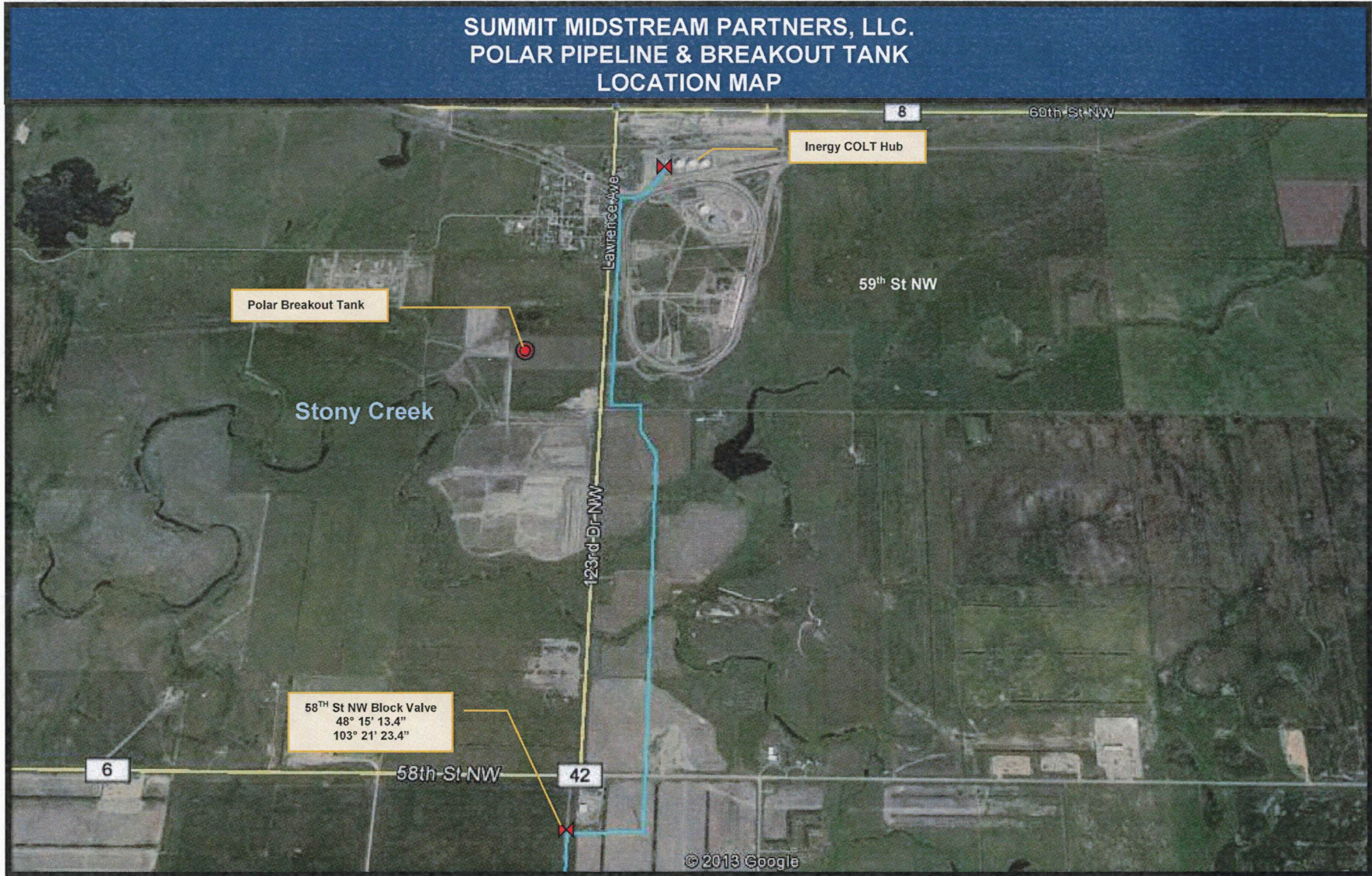
Worst Case Discharge Source Comparison:

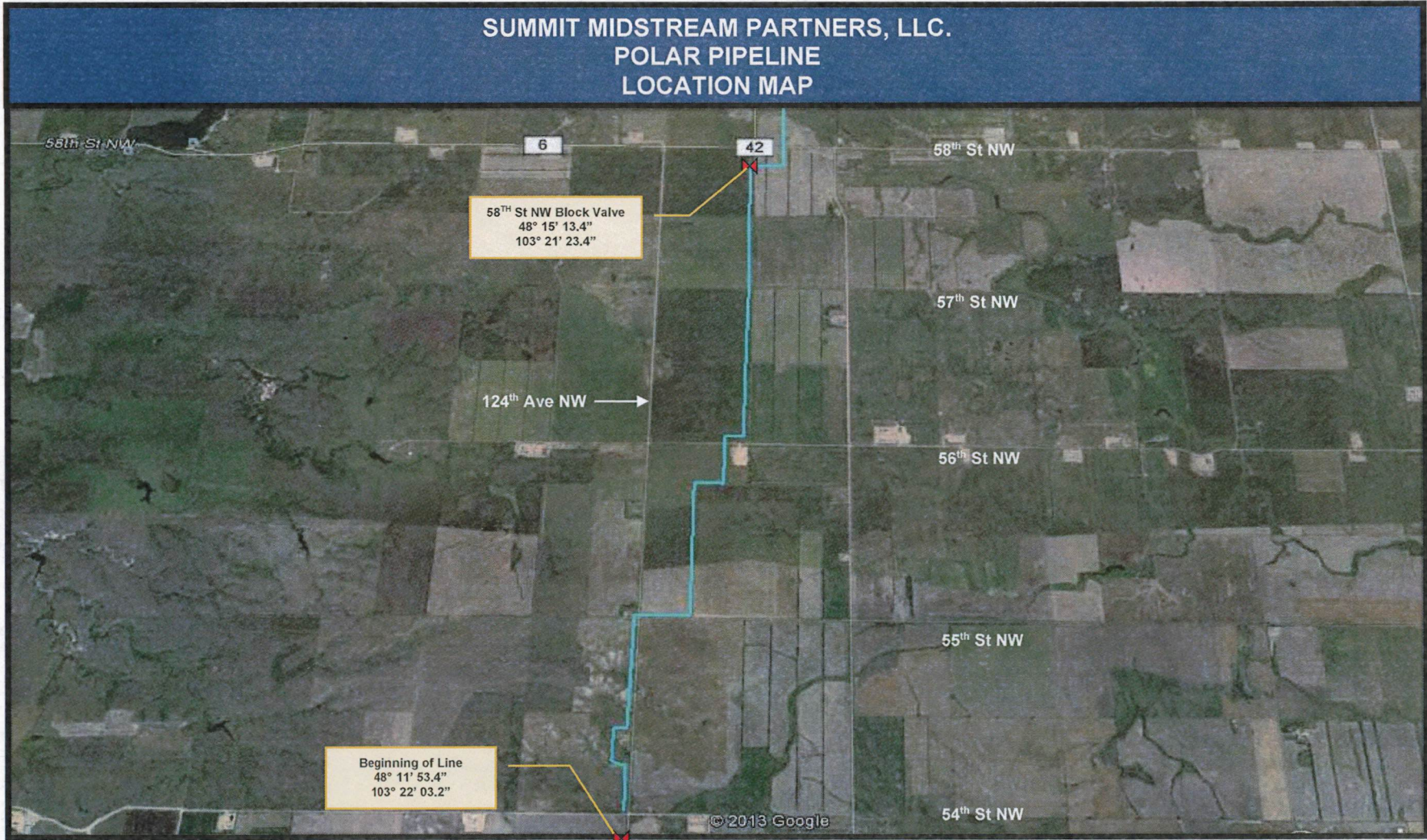
1	Pipeline Segments: Formula: (Diameter ft./2) x (Diameter ft./2) x 3.147 x (Length ft.) x 7.48052	
	Divide 8" – 10.55 mile Divide Tank Facility to MLV #1 section	3,469 barrels
	Polar 10" - BOL at 54 th St NW & 124 th Ave to 58 th St NW Block Valve.	2,495 barrels
	Polar 6" – 1.16 mile beginning to end section	217 barrels
	Little Muddy 10" - Construction not completed	0 barrels
2	Breakout Tank – Divide 8" Pipeline (see page above for calculation). (Worst Case Discharge)	6,000 barrels
3	Maximum Historical Discharge for Epping Gathering System	No reportable spills have occurred on this system

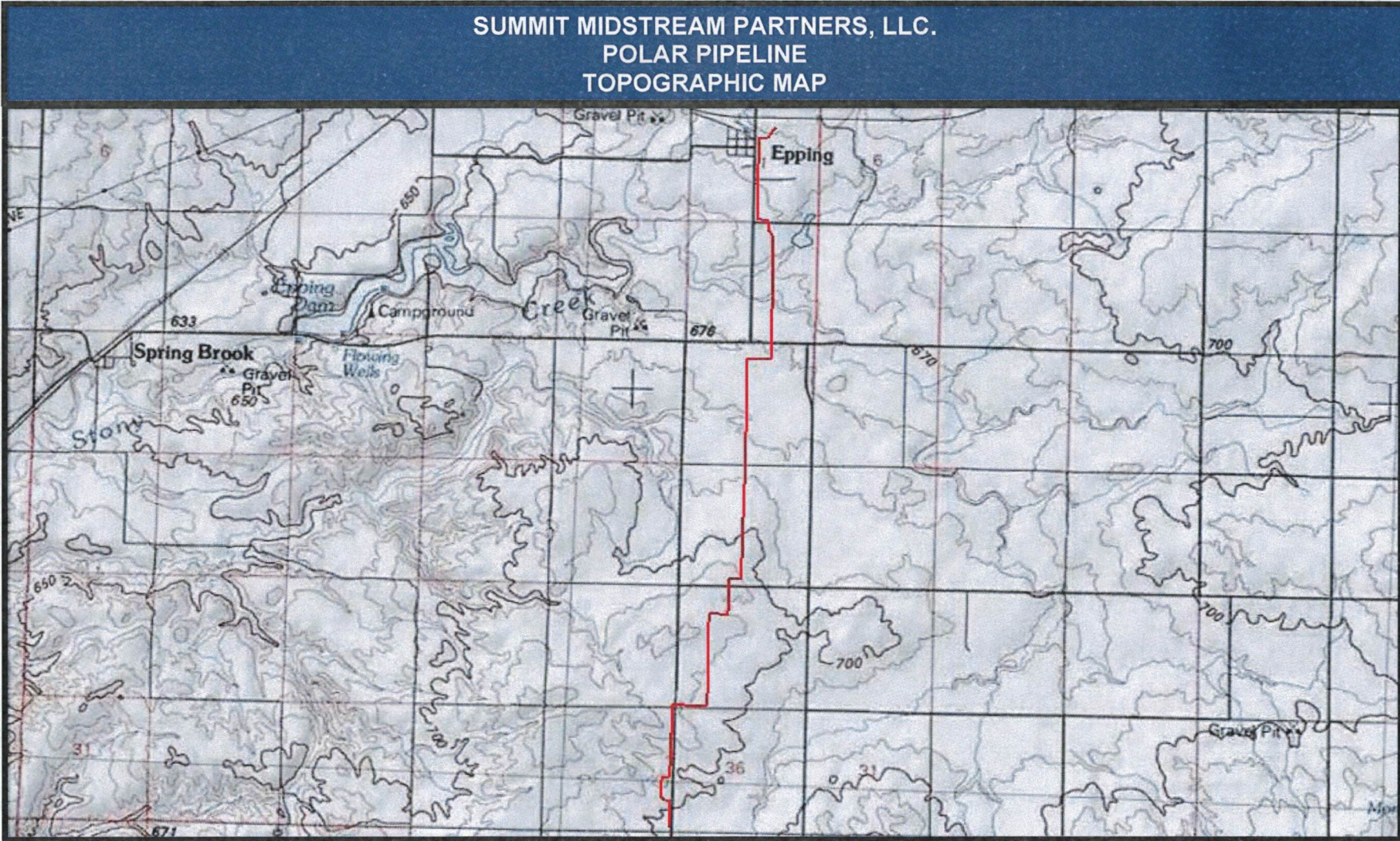
9.9 Pipeline Maps



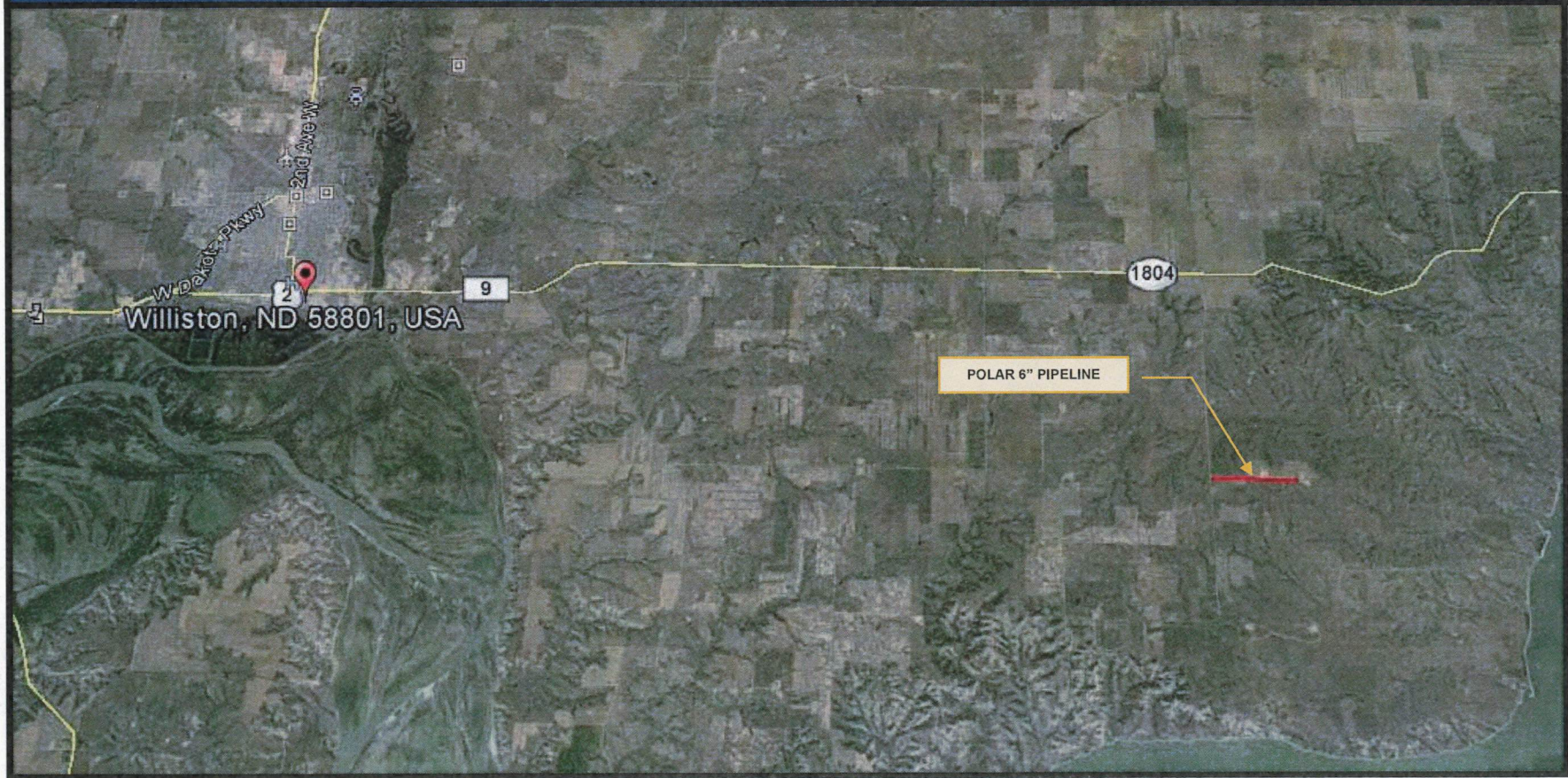
**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR PIPELINE & BREAKOUT TANK
LOCATION MAP**







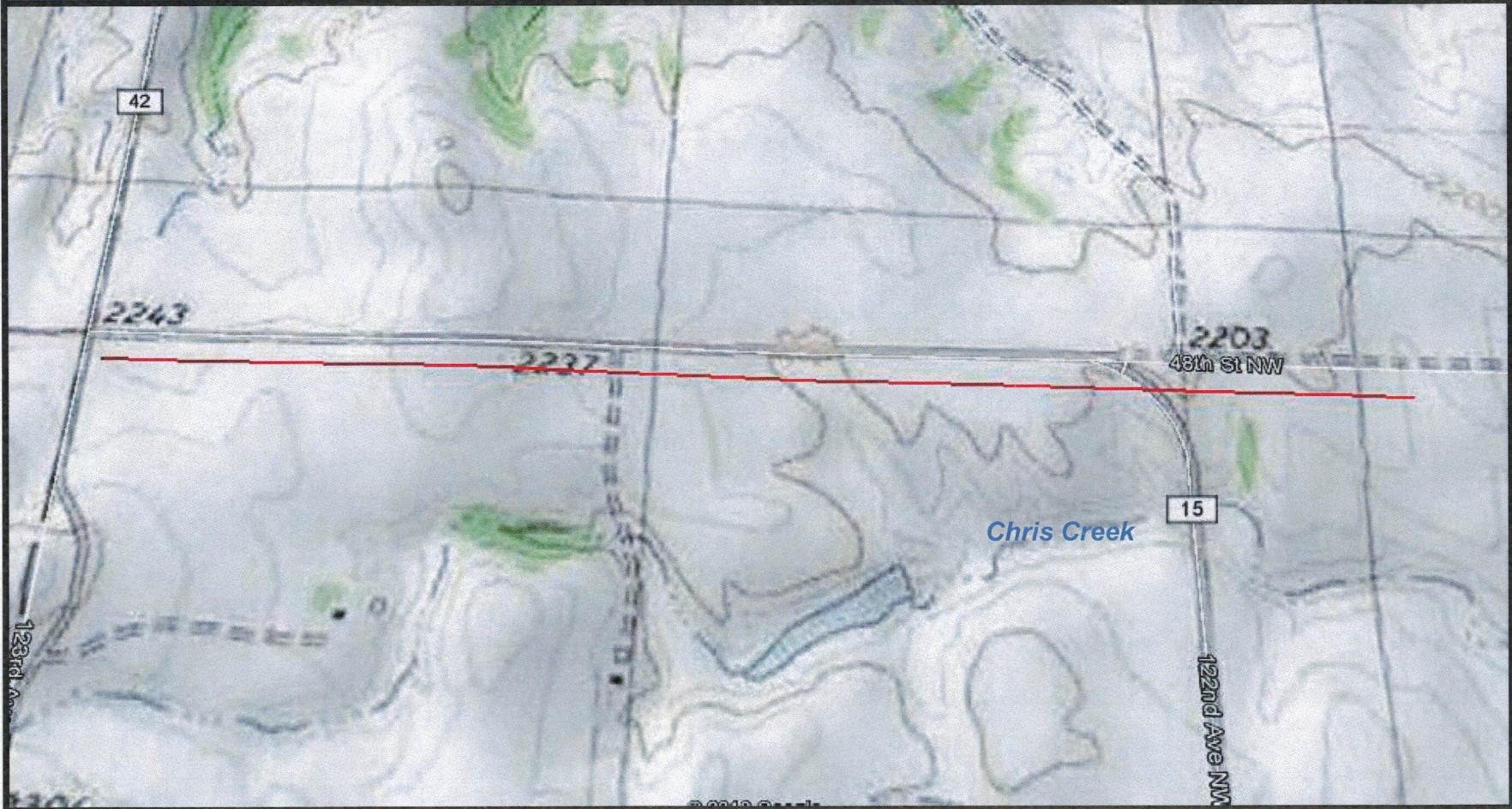
**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 6" PIPELINE
LOCATION MAP**



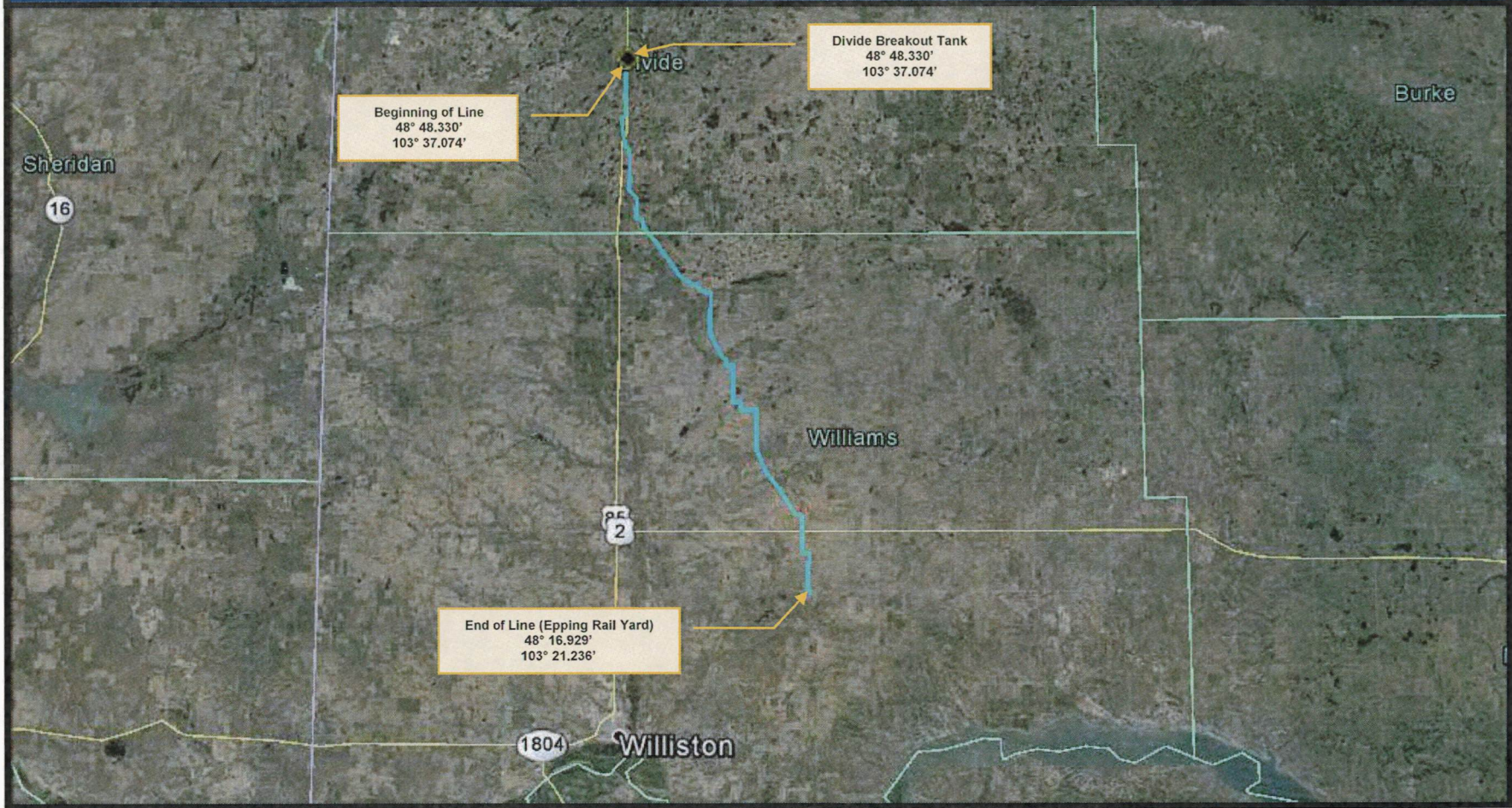
SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 6" PIPELINE
LOCATION MAP



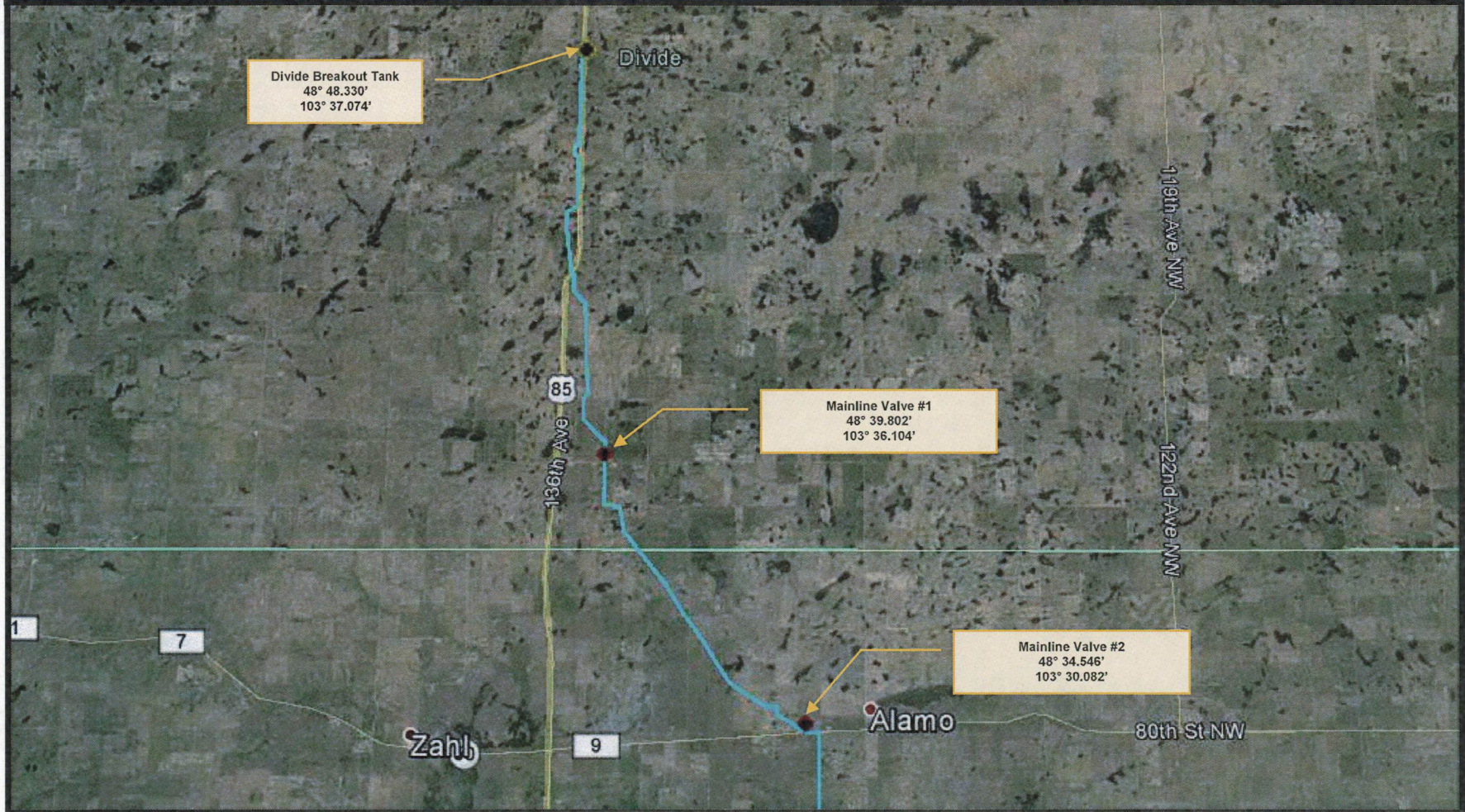
**SUMMIT MIDSTREAM PARTNERS, LLC.
POLAR 6" PIPELINE
TOPOGRAPHIC MAP**

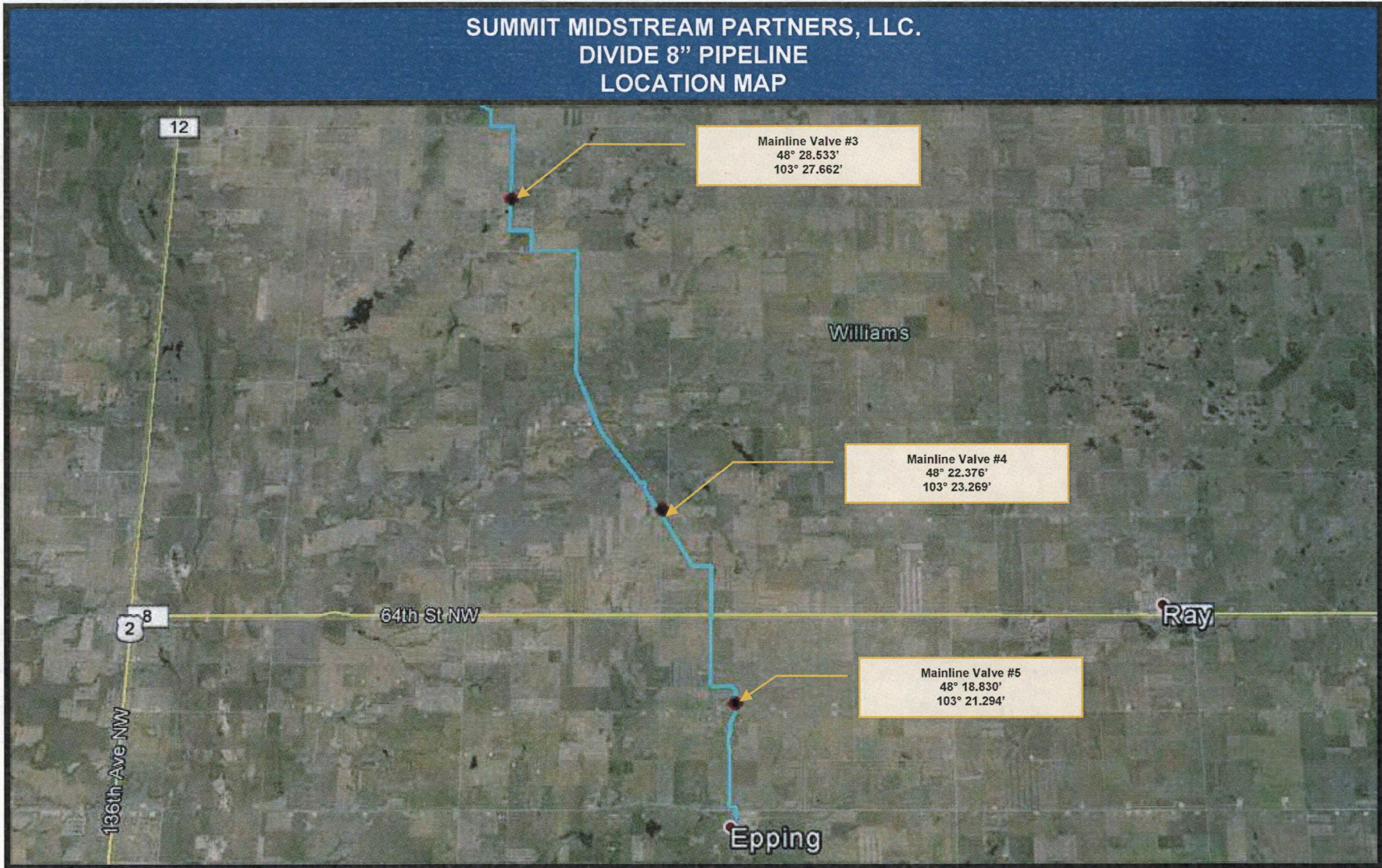


**SUMMIT MIDSTREAM PARTNERS, LLC.
DIVIDE 8" PIPELINE
LOCATION MAP**

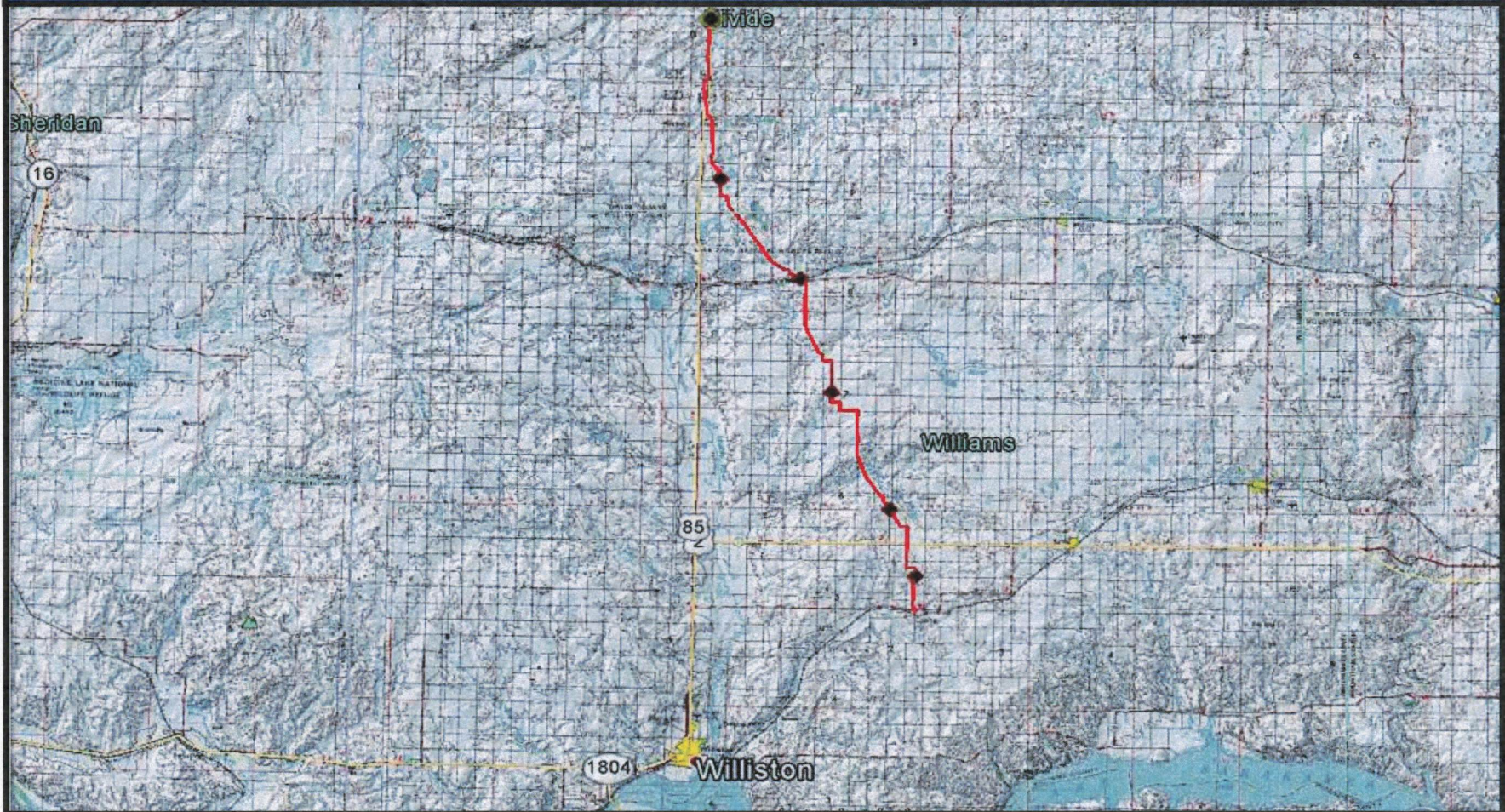


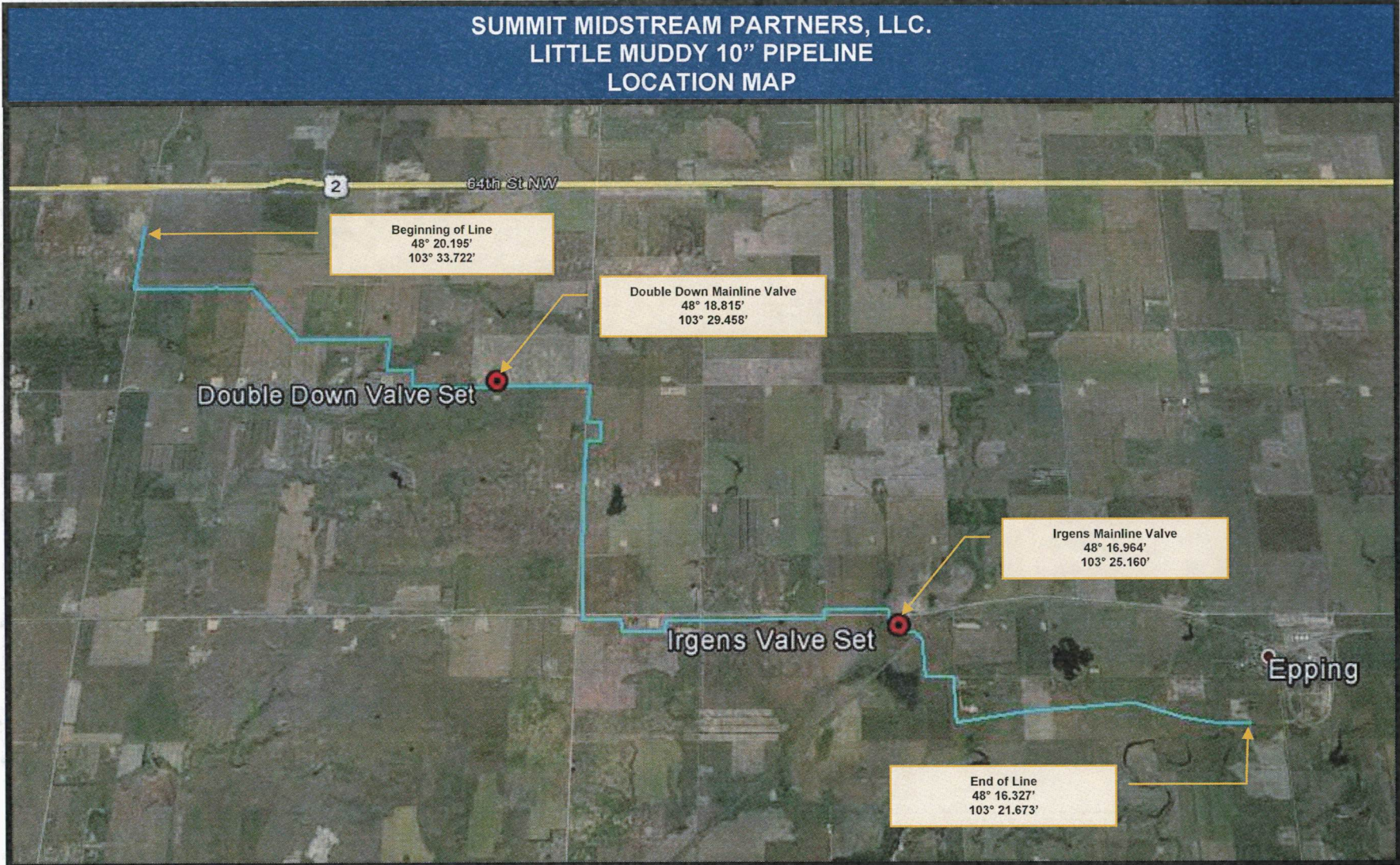
**SUMMIT MIDSTREAM PARTNERS, LLC.
DIVIDE 8" PIPELINE
LOCATION MAP**



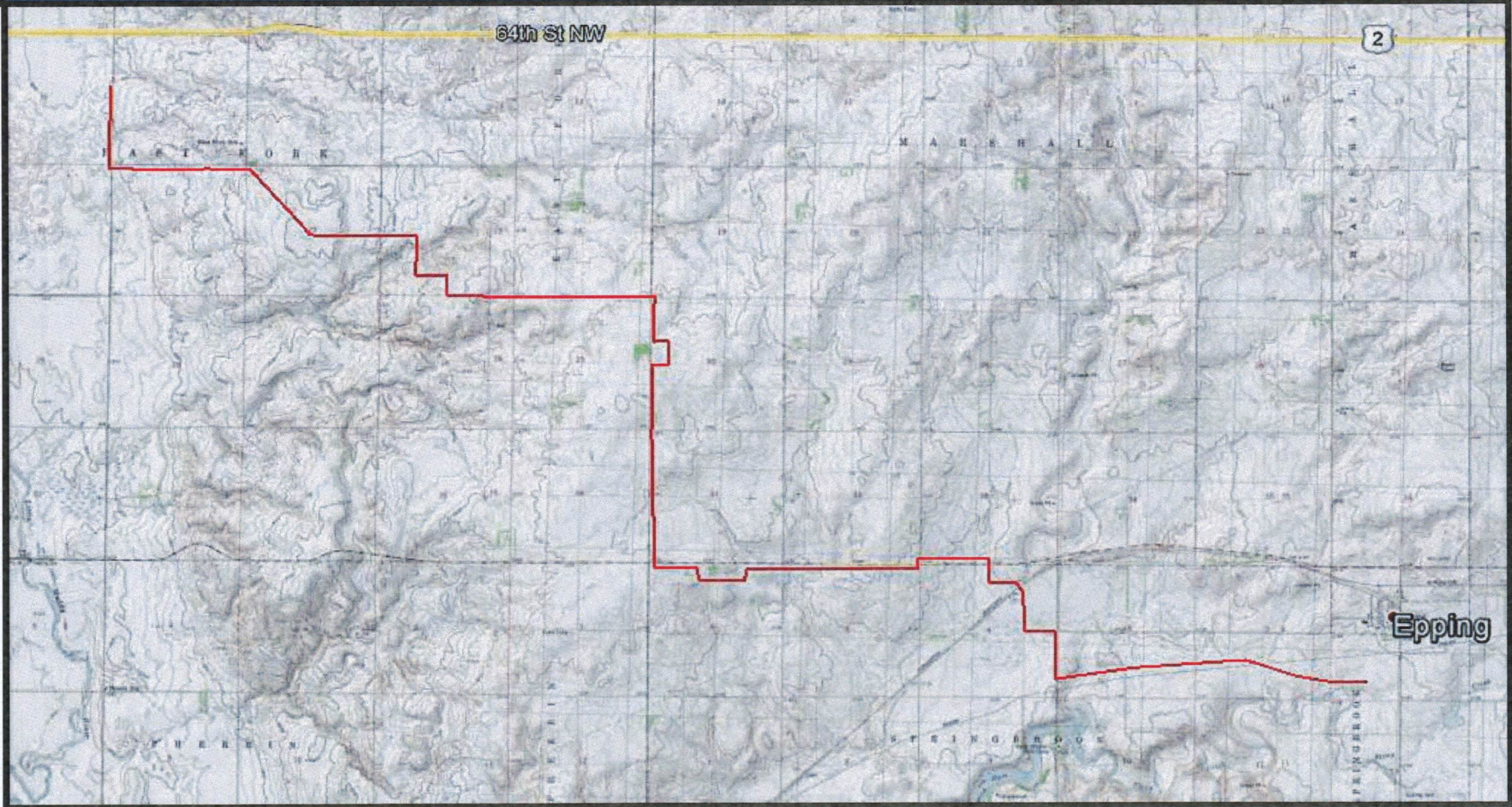


**SUMMIT MIDSTREAM PARTNERS, LLC.
DIVIDE 8" PIPELINE
TOPOGRAPHIC MAP**





**SUMMIT MIDSTREAM PARTNERS, LLC.
LITTLE MUDDY 10" PIPELINE
TOPOGRAPHIC MAP**



9.10 Pipeline Sections

Polar 10" Pipeline

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	<i>BOL at intersection of 54th St NW & 124th Ave NW Block Valve to 58th Ave NW Block Valve</i>	10.75	4.43	900	Williams	55 th St NW, 56 th St NW & 57 th St NW road crossings
2	58 th Ave NW Block Valve to Inergy COLT Hub	10.75	2.27	900	Williams	Stony Creek, City of Epping, Burlington Rail Spur/yard, 58 th St NW & 59 th St NW road crossings

Polar 6" Pipeline

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Polar 6" Pipeline	6.625	1.16	600	Williams	Chris Creek, Lake Sakakawea, 122 nd Ave NW

Divide 8" Section Matrix

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Divide Tank Facility to Main Line Valve #1	8.625	10.55	500	Divide	Hwy 85 NW, 94 th St, Numerous Surface Ponds, 92 nd St NW, 90 th St NW, Musta Lake, 89 th St. NW
2	Main Line Valve #1 to Main Line Valve #2	8.625	8.27	500	Divide & Williams	86 th St. NW, 85 th St NW, 133 rd Ave NW, 81 st St NW, 132 nd Ave NW, Numerous Surface Ponds
3	Main Line Valve #2 to Main Line Valve #3	8.625	8.08	500	Williams	CR 50, 129 th Ave NW, CR 12
4	Main Line Valve #3 to Main Line Valve #4	8.625	9.20	500	Williams	73 rd St NW, Lone Tree Lake, 72 nd St NW
5	Main Line Valve #4 to Main Line Valve #5	8.625	5.10	500	Williams	CR 10, 125 th Ave NW, Hwy 2
6	Main Line Valve #5 to Epping Rail Yard	8.625	2.40	500	Williams	62 nd St. NW, CR 8C, Hwy 8

Little Muddy 10"

#	Pipe Section	Pipe O.D. (in)	Length (mi)	WP (psig)	County	Sensitivities
1	Beginning of Line to Double Down Valve Set	10.750	3.65	500	Williams	CR9, numerous ponds, 131 st Ave NW, 62 nd St. NW
2	Double Down Valve Set to Irgens Valve Set	10.750	5.96	500	Williams	129 th Ave NW, Large Pond, CR 8, 128 th Ave NW
3	Irgens Valve Set to Epping Rail Yard.	10.750	4.59	500	Williams	Burlington Northern RR, Epping Dam Reservoir, Stoney Creek

9.11 Material Safety Data Sheets (MSDS)

Following is the MSDS for Crude Oil transported by the Epping Area Pipelines. MSDS sheets are also available at the Stanley, ND Office.

LIGHT CRUDE OIL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: LIGHT CRUDE OIL
Synonyms: Bakken Oil, Bakken Crude
Chemical Description: A naturally occurring mixture of aromatic hydrocarbons and small amounts of sulfur and nitrogen compounds
Product Use: Process stream, fuels and lubricants production
Manufacturer/Supplier: CENOVUS ENERGY INC.
500 Centre Street SE, PO Box 766
Calgary, AB T2P 0M5
Prepared By: Cenovus Energy Inc. Health and Safety
Phone Number: 1-403-766-2000
Emergency Telephone: 1-877-458-8080, CANUTEC 1-613-996-6666 (Canada)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Approximate Concentration (%)
Petroleum Crude Oil	8002-05-9	100 v/v
Benzene	71-43-2	0.1 – 1.0 v/v
Hydrogen Sulfide in liquid is <0.1% v/v, vapour phase may contain higher concentrations.		

3. HAZARDS IDENTIFICATION

Routes of Entry: Skin contact, skin absorption, eye contact, inhalation, ingestion
Emergency Overview: Warning. Flammable liquid and vapour. Liquid and vapour may cause irritation or burns to eyes, nose and throat. Inhalation of vapour may cause dizziness and drowsiness. Possible cancer hazard (benzene). Possible asphyxiation hazard (hydrogen sulfide). Wear personal protective equipment appropriate for the task.



WHMIS B2, D2-A, D2-B
NFPA F4, R0, H3

Potential Health Effects: Contains material which may cause cancer after long-term, repeated skin contact.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with large amounts of lukewarm water for 15 minutes, lifting upper and lower lids at intervals. Seek medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Flush skin with water. Get medical attention if irritation persists or large area of contact. Decontaminate clothing before re-use.

Inhalation: Ensure own safety. Remove victim to fresh air. Give oxygen, artificial respiration, or CPR if needed. Seek medical attention immediately.

Ingestion: Give 2-3 glasses of milk or water to drink unless patient is unconscious or has a decreased level of alertness. DO NOT INDUCE VOMITING. Keep patient warm and at rest. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

Flammable: Material will ignite at normal temperatures.
Means of Extinction: Foam, carbon dioxide (CO₂), dry chemical. Explosive accumulations can build up in areas of poor ventilation.
Special Procedures: Use water spray to cool fire-exposed containers, and to disperse vapors if spill has not ignited. Cut off fuel and allow flame to burn out.
TDG Classification: 3
Flash Point (°C) & Method: <-35 (PMCC) **Auto-Ignition Temp. (°C):** 250 (estimated)
Upper Explosive Limit (% v/v): 8 (estimated) **Lower Explosive Limit (% v/v):** 0.8 (estimated)
Sensitivity to Impact: No
Sensitivity to Static Discharge: Yes, at normal temperatures
Hazardous Combustion Products: Carbon monoxide, sulfur oxides, nitrogen oxides, smoke particles
NFPA 704 Rating: Flammability:4, Instability/Reactivity:0, Health:3

6. ACIDENTAL RELEASE MEASURES

Personnel precautions: Appropriately trained personnel should respond to uncontrolled releases. Avoid direct contact with material; use the personal protective equipment specified in Section 8. Stay upwind of release; isolate the immediate hazard area; and keep unnecessary and unprotected people away. Use water spray to cool containers. Eliminate all sources of ignition. Provide explosion-proof clearing ventilation, if possible.
Environmental precautions: Prevent material from entering soil, waterways, drains, sewers, or confined areas.
Cleanup measures: Stop leak if safe to do so. Dyke and pump material into containers for recycling or disposal. Contact appropriate regulatory authorities for disposal requirements (see Section 13). Notify the appropriate regulatory authorities of reportable releases (see Section 15).

7. HANDLING AND STORAGE

Handling: Wear appropriate personal protective equipment. Avoid contact with liquid. Avoid inhalation. Bond and ground all transfers. Avoid sparking conditions. Wash hands and face after handling and before eating, drinking or smoking.
Storage: Store material in a cool, dry, well-ventilated area away from heat, strong sunlight, hot metal surfaces and ignition sources. Use approved containers only. Separate from incompatible material (see Section 10).
Caution: Hydrogen sulfide may accumulate in headspaces of tanks and other equipment, even when concentrations in the liquid product are low. Factors increasing this hazard potential include heating, agitation and contact of the liquid with acid or acid salts. Assess the exposure risk by gas monitoring. Wear air supplying breathing apparatus if necessary. Overexposure to hydrogen sulfide may cause dizziness, headache, nausea and possibly unconsciousness and death.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits

Hazardous Ingredients	Alberta OEL	Saskatchewan	OSHA PEL	ACGIH TLV
Petroleum Crude Oil	300 ppm; 500 ppm (15min)	300 ppm	--	--
Benzene	0.5 ppm; 2.5 ppm (15min), Skin	--	1 ppm; 5 STEL; Petroleum Industry: 10 ppm; 25 ppm (C)	0.5 ppm; 2.5 STEL, Skin
Hydrogen Sulfide	10 ppm; 15 ppm (C)	--	20 ppm (C)	1 ppm

LIGHT CRUDE OIL

Engineering Controls: Use only in well-ventilated areas. Local exhaust ventilation required in confined areas. Equipment must be explosion proof.

Hygiene Measures: Wash hands and face after handling and before eating, drinking or smoking. Take off contaminated clothing and wash before re-use.

Personal Protection

Respirator: Where concentrations may exceed exposure limits, use full-face, positive pressure self-contained breathing apparatus; full-face, positive pressure supplied-air breathing apparatus; or cartridge air-purifying respirator approved for organic vapours (note: cartridge respirator not suitable for hydrogen sulfide, oxygen deficient or IDLH situations).

Gloves: Chemical-resistant gloves: Viton (Nitrile adequate for short exposure to liquid.)

Eyewear: Chemical splash goggles. A face shield may also be necessary, depending on handling conditions.

Footwear: As per safety policy.

Clothing: As per fire protection policy.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Odour & Appearance:	Dark Brown, hydrocarbon-like
Odour Threshold (ppm):	Not Available	Specific Gravity:	0.7 – 0.8
Vapour Density (air=1):	2.5 -5.0 (estimated)	Vapour Pressure (mmHg):	280-360 @ 20°C
Evaporation Rate:	Not Available	Boiling Pt. (°C):	-40 to 530
Freezing Pt. (°C):	<-60	pH:	Not Available
Coefficient of Water/Oil Distribution:	<0.1	Percent Volatiles, (v/v):	15 - 30 (estimated)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal, ambient conditions.

Incompatibility: Incompatible with strong oxidizing agents (e.g. chlorine, peroxide).

Reactivity: Reactive to heat, strong sunlight and ignition sources.

Hazardous Decomposition Products: Carbon monoxide, sulfur oxides, nitrogen oxides, smoke particles

Hazardous Polymerization: Not known to occur.

11. TOXICOLOGICAL INFORMATION

Acute Exposure

Vapour may cause irritation of eyes, nose and throat, dizziness and drowsiness. Contact with skin may cause irritation and possibly dermatitis. Contact of liquid with eyes may cause severe irritation or burns.

Hazardous Ingredients	Result	Species	Dose	Exposure
Petroleum	LD50 Oral	Rat	>5 g/kg	-
Crude Oil	LD50 Dermal		>2 g/kg	
	LC50 Inhalation		>4300 ppm	
Benzene	LD50 Oral	Rat	0.9 g/kg	-
	LC50 Inhalation		13200 ppm	4 hours
Hydrogen Sulfide	LC50 Inhalation	Rat	444 ppm	4 hours

LIGHT CRUDE OIL

Chronic Exposure

Due to presence of benzene, long term exposure may increase the risk of anemia and leukemia. Repeated skin contact may increase the risk of skin cancer.

Irritant: Yes

Carcinogenicity: Yes

Mutagenicity: Possibly

Skin Sensitization: Yes

Reproductive Toxicity: Possibly

Synergistic Materials/Products: None reported

Respiratory Sensitization: No

Teratogenicity: Possibly

Crude Oil

IARC – Crude oil is not classifiable as to its carcinogenicity to humans (Group 3).

ACGIH, OSHA, US NTP – not listed as a carcinogen.

Benzene

ACGIH A1-Confirmed Human Carcinogen

IARC, OSHA, US NTP – There is sufficient evidence that benzene is carcinogenic to man.

Hydrogen Sulfide

Hydrogen sulfide is not considered to be mutagenic or a reproductive or developmental toxicant.

ACGIH, IARC, OSHA, US NTP – Hydrogen sulfide is not listed as a carcinogen.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Not available

Biodegradability: Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Contact appropriate regulatory authorities for disposal requirements. Empty containers or liners may retain a product residue. This material and its container and rinseates must be disposed of safely and in compliance with the requirements of environmental protection and waste disposal legislation and regional local authority requirements. Avoid dispersal of spilled material and runoff contact with soil, waterways, drains and sewers.

Use which results in chemical or physical change of this material could subject it to regulation as a hazardous product. Container residues and rinseates could be considered hazardous waste.

US EPA Waste Numbers

D001 – Ignitability characteristic

D018 – Toxicity characteristic (Benzene) (Regulatory Level = 0.5 mg/L)

14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Proper Shipping Name	Class	PG	Label	Additional Information
TDG	UN1267	Petroleum Crude Oil	3	I	Flammable Liquids	
DOT	UN1267	Petroleum Crude Oil	3	I	Flammable Liquid	49 CFR 173.150; 173.202; 173.242
IMDG	UN1267	Petroleum Crude Oil	3	I	Flammable Liquid	12°C, P001 EmS:F-E, S-E MARPOL Annex I
ICAO/IATA	UN1267	Petroleum Crude Oil	3	I	Flammable Liquid	ERG Code: 3L

North American Emergency Response Guide Number: 128

15. REGULATORY INFORMATION**Canadian Classification**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS Classification: B2 – Flammable and combustible material – Flammable liquid
D2A – Poisonous and infectious material – Other effects – Very toxic
D2B – Poisonous and infectious material – Other effects – Toxic

WHMIS Ingredient Disclosure List:

Meets criteria for disclosure at 0.1% or greater of benzene.

CEPA Domestic Substance List: All components are either listed or exempt.

US Federal and State Regulations

The contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CERCLA/SARA – Section 302 Extremely Hazardous Substances: Exempt.

CERCLA/SARA 311-312 (Title III Hazard Categories):

Hydrogen Sulfide – Fire, Immediate (Acute),

Produced Hydrocarbons – Fire, Sudden Release of Pressure, Immediate (Acute), Delayed (Chronic).

CERCLA/SARA 313, Reportable Quantity: Benzene: 10 lbs; RCRA Code U019.

Clean Air Act Section 112(b) Hazardous Air Pollutants: Exempt.

United States National Chemical Inventory: All components are listed or exempted.

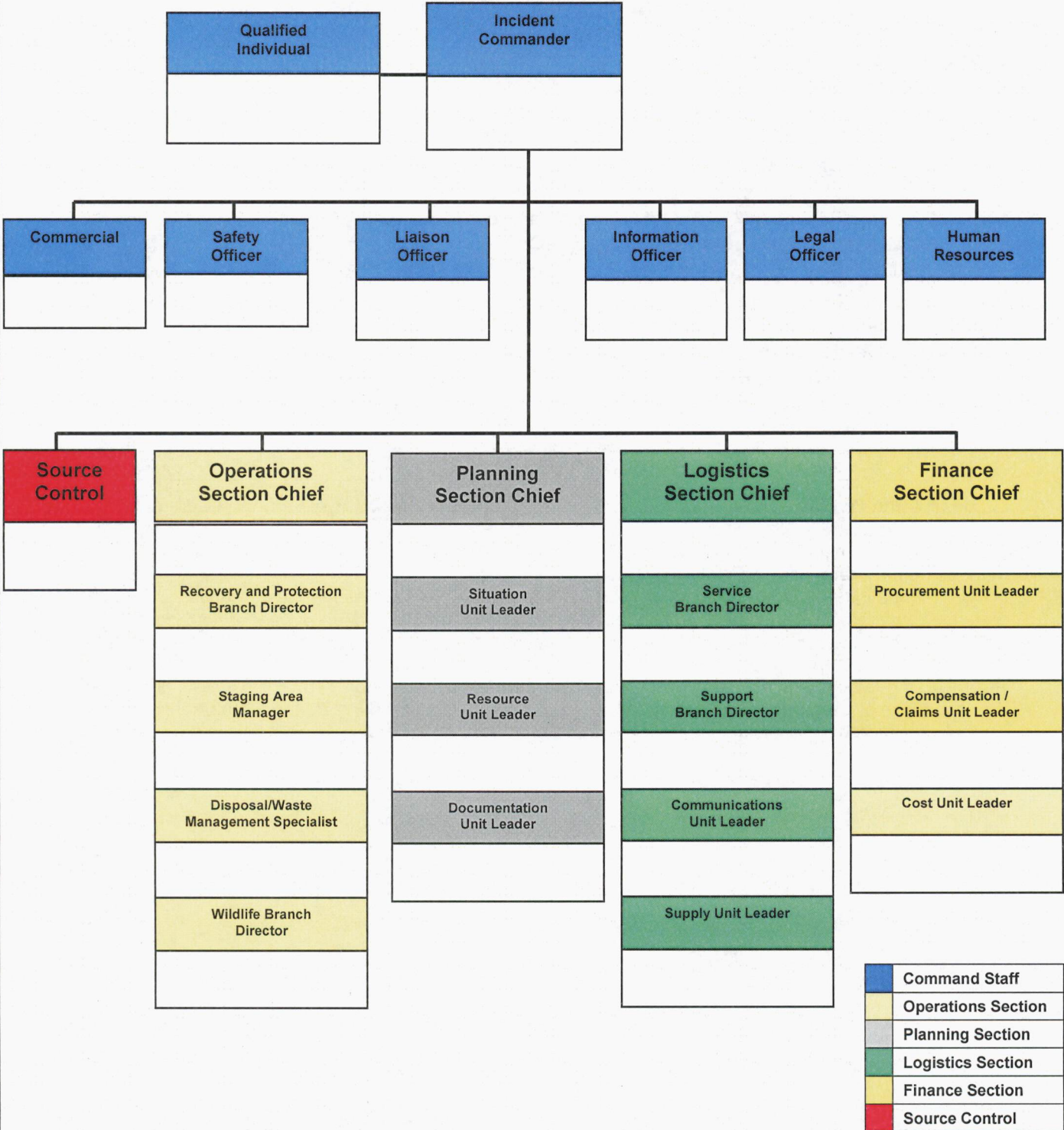
California 65: This product contains benzene a chemical known to the State of California to cause cancer and developmental harm.

16. OTHER INFORMATION

Guide to Abbreviations: ACGIH = American Conference of Governmental Hygienists; C = Ceiling; CAS = Chemical Abstracts Service Registry; Cenovus = Supplier recommendation based on composition; CEPA = Canadian Environmental Protection Act; DOT = Department of Transport; EmS = Environmental Management System; ERG = Emergency Response Guide
IARC = International Agency for Research on Cancer; ICAO/IATA = International Civil Aviation Organization/International Air Transport Association; IMDG = International Marine Dangerous Goods; MARPOL = The International Convention for the Prevention of Pollution from Ships; OEL = Occupational Exposure Limit; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; PG = Packing Group; Skin = Danger of skin absorption; SARA STEL = Short Term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; US NTP = United States National Toxicology Program; v/v = volume per volume; WHMIS = Workplace Hazardous Materials Information System

SECTION 10 RESPONSE MANAGEMENT

INCIDENT COMMAND ORGANIZATIONAL CHART



Internal Notifications

EMERGENCY CONTACT INFORMATION – INTERNAL

Summit Operations Communications Center (SOCC) / Operations Monitoring Center (OMC)			
	SOCC/OMC Emergency	SOCC/OMC Non- emergency	Email
All Regions	888-643-7929 214-462-7714 214-462-7715	n/a	SOCC@summitmidstream.com
Gary Martinez (Dir., SOCC)	832-413-4775	713-309-5602	gmartinez@summitmidstream.com
Corporate and Field Offices			
	Phone	Fax	Address
Corporate Offices	--	--	--
Atlanta	770-504-5000	770-504-5005	2300 Windy Ridge Pkwy, Suite 240 South Atlanta, GA 30339
Dallas (HQ)	214-242-1955	214-242-1972	2100 McKinney Ave, Suite 1250 Dallas, TX 75201
Denver	720-452-6220		999 18 th Street, Suite 2400 Denver, CO 80202
Houston	832-413-4770	832-413-4780	1450 Lake Robbins Drive, Suite 300 The Woodlands, TX 77380
Field Offices	--	--	--
Fruita	970-858-3425	970-440-1019	1950 Hwy 6 & 50 Fruita, CO 81521
Grand Prairie	n/a	n/a	2771 South Great Southwest Pkwy, Unit A Grand Prairie, TX 75052
Rangely	701-500-2189	n/a	101 East Main Street Rangely, CO 81648
Rifle	970-440-1000	970-440-1019	2128 Railroad Avenue, Suite 106 Rifle, CO 81650
Stanley	701-264-3617	n/a	1101 Fourth Street SE, Suite 201 Stanley, ND 58784
Vernal	n/a	n/a	1385 East 1300 South Vernal, UT 84078
Executives			
	Office	Cell	Email
Brock Degeyter (SVP; General Counsel)	214-462-7705	214-789-4464	bdegeyter@summitmidstream.com
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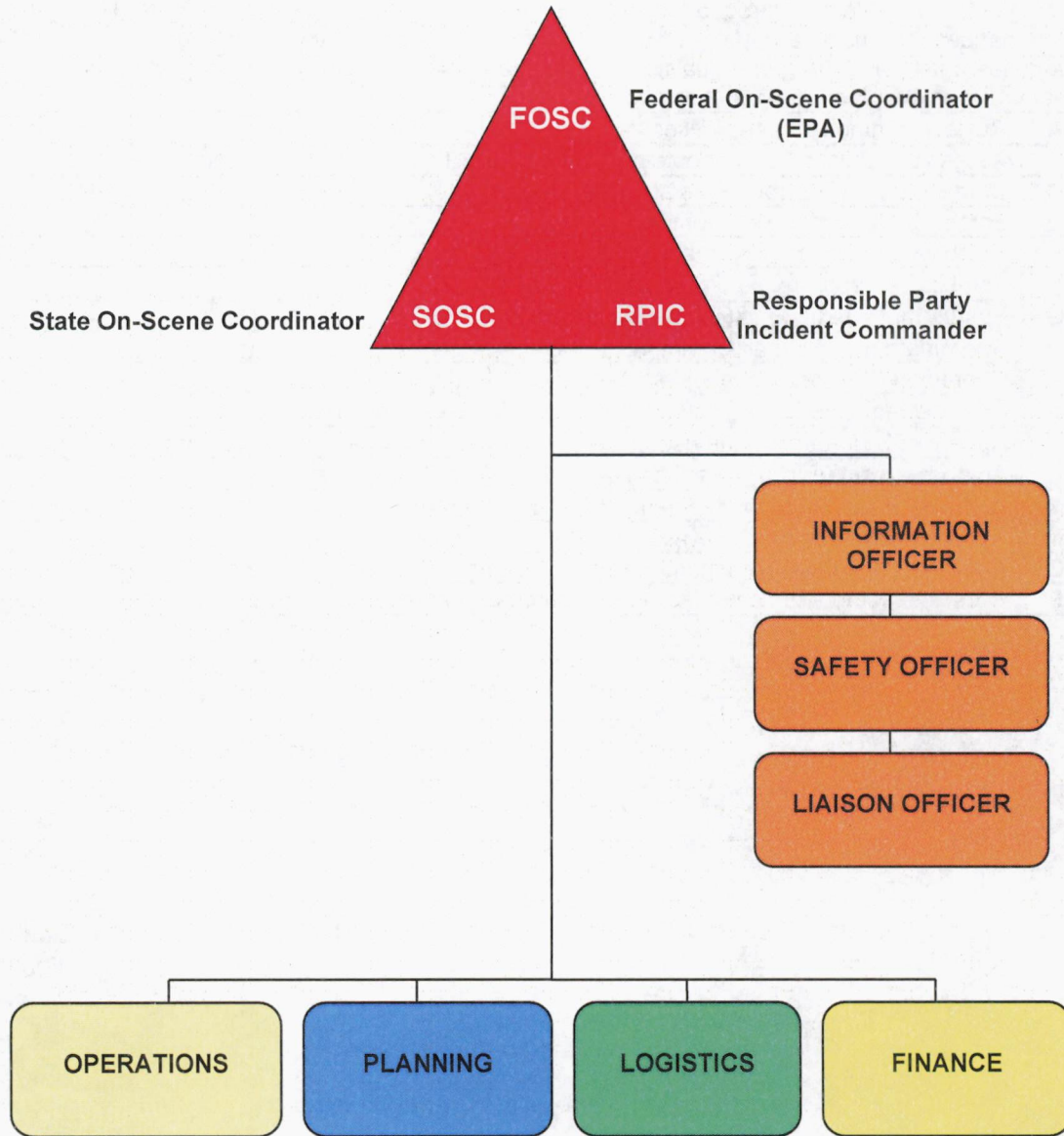
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Incident Command System

ICS is based upon a flexible, scalable response organization providing a common framework within which people can work together effectively. These people may be drawn from multiple agencies that do not routinely work together, and ICS is designed to give standard response and operation procedures to reduce the problems and potential for miscommunication on such incidents. ICS has been summarized as a "first-on-scene" structure, where the first responder of a scene has charge of the scene until the incident has been declared resolved, a superior-ranking responder arrives on scene and seizes command, or the Incident Commander appoints another individual Incident Commander.

Emergency Response Team Organizational Chart



INCIDENT COMMANDER

On most incidents, a single Incident Commander carries out the Command activity. The Incident Commander is selected through pre-designation, qualifications, or experience. The Incident Commander may have a deputy, who may be from the same entity or from an assisting entity. Deputies must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

A	Review common responsibilities.
B	Assess the situation and/or obtain a briefing from the prior Incident Commander.
C	Determine incident objectives and strategies.
D	Establish the immediate priorities.
E	Establish an Incident Command Post.
F	Establish an appropriate organization.
G	Ensure that adequate safety measures are in place.
H	Coordinate activity of all Command and General Staff.
I	Coordinate with key stakeholders and officials through the Liaison Officer.
J	Approve requests for additional resources or for the release of resources.
K	Approve, if appropriate, the use of trainees, volunteers, or auxiliary personnel.
L	Authorize release of information through the Information Officer.
M	Approve and authorize implementation of a Repair Plan.
N	Ensure incident funding is available.
O	Coordinate incident investigation responsibilities.
P	Order the demobilization of incident resources, when appropriate.

UNIFIED COMMAND

While a single Incident Commander normally handles the command function, an ICS organization may be expanded into a Unified Command for complex responses which cross jurisdictional boundaries or involve multiple agencies with geographic or functional jurisdiction. The Unified Command brings together the "Incident Commanders" of all major organizations involved in the response to function as a team with a common set of incident objectives and strategies.

The Unified Command will typically include:

- The pre-designated Federal On-Scene Coordinator,
- The State On-Scene Coordinator,
- The Incident Commander for the responsible party, and
- Other incident commanders or on-scene coordinators (when appropriate).

Actual Unified Command makeup for a specific incident will be determined on a case-by-case basis taking into account: (1) the specifics of the incident; (2) determinations outlined in the Area Contingency Plan; or (3) decisions reached during the initial meeting of the Unified Command. The makeup of the Unified Command may change as an incident progress, in order to account for changes in the situation.

The Unified Command is responsible for overall management of the incident. The Unified Command directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. Each Unified Command member may assign Deputy Incident Commander(s) to assist in carrying out Incident Command responsibilities. Unified Command members may also be assigned individual legal and administrative support from their own organizations.

As a component of an ICS, the Unified Command facilitates and coordinates the effective involvement of various agencies and responders. It links the organizations responding to the incident and provides a forum for these agencies to make consensus decisions. Under Unified Command, the various jurisdictions and/or agencies, and non-government responders may blend together throughout the Incident Command System organization to create an integrated response team. Assisting or cooperating agencies that are not part of the Unified Command can also participate through Agency Representatives working with the Liaison Officer. It is important to note that participation in a Unified Command occurs without any agency abdicating authority, responsibility, nor accountability.

INFORMATION OFFICER

The Information Officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one Information Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdictional incidents. The Information Officer may have assistants, as necessary, and the assistants may also represent assisting agencies or jurisdictions.

A	Review Common Responsibilities.
B	Determine from the Incident Commander if there are any limits on information release.
C	Develop material for use in news briefings.
D	Obtain Incident Commander approval for news media releases.
E	Inform news media and conduct news briefings.
F	Arrange for tours and other interviews or briefings that may be required.
G	Obtain news media information that may be useful for incident planning.
H	Maintain current information summaries and/or displays on the incident.
I	Provide information on status of incident to assigned personnel.
J	Establish and staff a Joint Information Center (JIC), as necessary.
K	Maintain Unit/Activity Log (ICS 214).

SAFETY OFFICER

<p>The Safety Officer is responsible for monitoring and assessing hazardous and unsafe situations and developing measures to assure personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although the Safety Officer may exercise emergency authority to prevent or stop unsafe acts when immediate action is required. The Safety Officer maintains awareness of active and developing situations, ensures the Site Safety and Health Plan is prepared and implemented, and includes safety messages in each Incident Action Plan.</p> <p>Only one Safety Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents.</p>	
A	Review Common Responsibilities.
B	During initial response, document the hazard analysis process addressing hazard identification, personal protective equipment, control zones, and decontamination area.
C	Participate in planning meetings to identify any health and safety concerns inherent in the operations daily work plan.
D	Review the Repair Plan for safety implications.
E	Exercise emergency authority to prevent or stop unsafe acts.
F	Investigate accidents that have occurred within incident areas.
G	<p>Ensure preparation and implementation of Site Safety and Health Plan (SSHP) in accordance with the Area Contingency Plan (ACP) and state and Federal OSHA regulations. The SSHP shall, at a minimum, address, include, or contain the following elements:</p> <ul style="list-style-type: none"> - Health and safety hazard analysis for each site task or operation. - Personnel training requirements. - PPE selection criteria. - Site-specific occupational medical monitoring requirements. - Air monitoring plan: area/personal. - Site control measures. - Confined space entry procedures "only if needed". - Pre-entry briefings (tailgate meetings): initial and as needed. - Pre-operations health and safety conference for all incident participants. - Quality assurance of SSHP effectiveness
H	Assign assistants and manage the incident safety organization.
I	Maintain Unit/Activity Log (ICS 214).

LIAISON OFFICER

Incidents that are multi-jurisdictional, or involve several agencies, may require the establishment of the Liaison Officer position on the Command Staff. The Liaison Officer is the point of contact for the assisting and cooperating Agency Representatives and stakeholder groups.

Only one Liaison Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The Liaison Officer may have assistants, as necessary, and the assistants may also represent assisting agencies or jurisdictions.

A	Review Common Responsibilities (page 6-2).
B	Provide a point of contact for assisting and cooperating Agency Representatives.
C	Identify Agency Representatives from each agency, including communications link and location.
D	Maintain a list of assisting and cooperating agency and stakeholder group contacts.
E	Assist in establishing and coordinating interagency contacts.
F	Keep agencies supporting incident aware of incident status.
G	Monitor incident operations to identify current or potential inter-organizational issues and advise Incident Command, as appropriate.
H	Participate in planning meetings; provide current resource status information, including limitations and capabilities of assisting agency resources.
I	Provide information and support to local government officials and stakeholder groups.
J	Maintain Unit/Activity Log (ICS 214).

OPERATIONS SECTION CHIEF

The Operations Section Chief, a member of the General Staff, is responsible for managing all operations directly applicable to the primary mission. The Operations Section Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety and Health Plan; directs the preparation of unit operational plans; requests or releases resources; makes expedient changes to the Incident Action Plans as necessary; and reports such to the Incident Commander.

A	Review Common Responsibilities.
B	Develop operations portion of Repair Plan.
C	Brief and assign operations personnel in accordance with Repair Plan.
D	Supervise execution of the Repair Plan for Operations.
E	Request resources needed to implement Operation's tactics as part of the Repair Plan development (ICS 215).
F	Ensure safe tactical operations.
G	Make, or approve, expedient changes to the Repair Plan during the operational period, as necessary.
H	Approve suggested list of resources to be released from assigned status (not released from the incident).
I	Assemble and disassemble teams/task forces assigned to operations section.
J	Report information about changes in the implementation of the Repair Plan, special activities, events, and occurrences to Incident Commander as well as to Planning Section Chief and Information Officer.
K	Maintain Unit/Activity Log (ICS 214).

STAGING AREA MANAGER

Under the Operations Section Chief, the Staging Area Manager is responsible for managing all activities within the designated staging areas.

A	Review Common Responsibilities.
B	Implement pertinent sections of the Repair Plan.
C	Establish and maintain boundaries of staging areas.
D	Post signs for identification and traffic control.
E	Establish check-in function, as appropriate.
F	Determine and request logistical support for personnel and/or equipment, as needed.
G	Advise Operations Section Chief of all changing situation/conditions on scene.
H	Respond to requests for resource assignments.
I	Respond to requests for information, as required.
J	Demobilize or reposition staging areas, as needed.
K	Maintain Unit/Activity Log (ICS 214).

RECOVERY & PROTECTION BRANCH DIRECTOR

The Recovery and Protection Branch Director is responsible to oversee and implement the protection, containment, and cleanup activities established in the Incident Action Plan. The Recovery and Protection Branch Director report to the Operations Section Chief.

A	Review Common Responsibilities.
B	Participate in planning meetings, as required.
C	Develop operations portion of Repair Plan.
D	Brief and assign operations personnel in accordance with Repair Plan.
E	Supervise operations.
F	Determine resource needs.
G	Review recommendations and initiate release of resources.
H	Report information about special activities, events, and occurrences to Operations Section Chief.
I	Maintain Unit/Activity Log (ICS 214).

DISPOSAL GROUP SUPERVISOR

Under the Recovery and Protection Branch Director, the Disposal Group Supervisor is responsible for coordinating the on-site activities of personnel engaged in collecting, storing, transporting, or disposing of waste materials. Depending on the size and location of the spill, the disposal groups may be further divided into Strike Teams, Task Forces, and single resources.	
A	Review Common Responsibilities.
B	Participate in planning meetings, as required.
C	Develop operations portion of Repair Plan.
D	Brief and assign operations personnel in accordance with Repair Plan.
E	Supervise operations.
F	Determine resource needs.
G	Review recommendations and initiate release of resources.
H	Report information about special activities, events, and occurrences to Operations Section Chief.
I	Maintain Unit/Activity Log (ICS 214).

SOURCE CONTROL SUPERVISOR

Under the direction of the Emergency Response Branch Director, the Salvage/Source Control Group Supervisor is responsible for coordinating and directing all salvage/source control activities related to the incident.	
A	Review Common Responsibilities.
B	Coordinate development of Repair Plan.
C	Determine resource needs.
D	Direct and coordinate implementation of the Repair Plan.
E	Manage dedicated resources.
F	Brief Emergency Response Branch Director on activities.
G	Maintain Unit/Activity Log (ICS 214).

WILDLIFE BRANCH DIRECTOR

The Wildlife Branch Director is responsible for minimizing wildlife losses during spill responses; coordinating early aerial and ground reconnaissance of wildlife at the spill site, and reporting results to the Situation Unit Leader; employing wildlife hazing measures as authorized in the Incident Action Plan; and recovering and rehabilitating impacted wildlife. A central wildlife processing center should be identified and maintained for: evidence tagging, transportation, veterinary services, treatment and rehabilitation, storage, and other support needs. The activities of private wildlife care groups, including those employed by the responsible party, will be overseen and coordinated by the Wildlife Branch Director.

A	Review Common Responsibilities.
B	Develop Wildlife Branch portion of the Repair Plan.
C	Supervise Wildlife Branch operations.
D	Determine resource needs.
E	Review suggested list of resources to be released and initiate recommendation for release of resources.
F	Assemble and disassemble Strike Teams/Task Forces assigned to the Wildlife Branch.
G	Report information about special activities, events, and occurrences to Operations Section Chief.
H	Maintain Unit/Activity Log (ICS 214).

PLANNING SECTION CHIEF

The Planning Section Chief, a member of the General Staff, is responsible for collecting, evaluating, disseminating, and using information about the incident and status of resources. Information is needed to: 1) understand the current situation, 2) predict probable course of incident events, and 3) prepare alternative strategies for the incident.

A	Review Common Responsibilities.
B	Activate Planning Section units.
C	Assign available personnel already on site to ICS organizational positions, as appropriate.
D	Collect and process information about the incident.
E	Supervise Repair Plan preparation.
F	Provide input to the Incident Command and Operations Sections Chief in preparing the Repair Plan.
G	Participate in planning and other meetings, as required.
H	Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the Repair Plan.
I	Determine need for any specialized resources in support of the incident.
J	Provide Resources Unit with the Planning Section's organizational structure, including names and locations of assigned personnel.
K	Assign Technical Specialists, where needed.
L	Assemble information on alternative strategies.
M	Assemble and disassemble Strike Teams or Task Forces, as necessary.
N	Provide periodic predictions on incident potential.
O	Compile and display incident status summary information.
P	Provide status reports to appropriate requesters.
Q	Advise General Staff of any significant changes in incident status.
R	Instruct Planning Section Units in distribution and routing of incident information.
S	Prepare resource release recommendations for submission to Incident Command.
T	Maintain Section records.
U	Maintain Unit/Activity Log (ICS 214).

SITUATION UNIT LEADER

The Situation Unit Leader is responsible for collecting and evaluating information about the current and possible future, status of the spill and the spill response operations. This responsibility includes compiling information regarding the type and amount of oil spilled the amount of oil recovered, the oil's current location and anticipated trajectory, and impacts on natural resources. This also includes providing information to the GIS Specialist(s) for mapping the current and possible future situation, and preparing reports for the Planning Section Chief.

A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing and special instructions from the Planning Section Chief.
D	Participate in planning meetings, as required.
E	Prepare and maintain Incident Situation Display.
F	Collect and maintain current incident data.
G	Prepare periodic predictions, as requested by the Planning Section Chief.
H	Prepare, post, and disseminate resource and situation status information, as required in the Incident Information Center.
I	Prepare the Incident Status Summary (ICS 209).
J	Provide status reports to appropriate requesters.
K	Provide photographic services and maps.

RESOURCES UNIT LEADER

The Resources Unit Leader (RUL) is responsible for maintaining the status of all resources (primary and support) at an incident. The RUL achieves this by developing and maintaining a master list of all resources, including check-in, status, current location, etc. This unit is also responsible for preparing parts of the Incident Action Plan (ICS 203, 204 & 207) and compiling the entire plan in conjunction with other members of the ICS, (e.g., Situation Unit, Operations, Logistics) and determining the availability of resources

A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing and special instructions from the Planning Section Chief.
D	Participate in Planning Meetings, as required.
E	Establish check-in function at incident locations.
F	Using the Incident Briefing (ICS 201), prepare and maintain the Incident Situation Display (organization chart and resource allocation and deployment sections).
G	Establish contacts with incident facilities to track resource status.
H	Gather, post, and maintain incident resource status.
I	Maintain master roster of all resources checked in at the incident.
J	Prepare Organization Assignment List (ICS 203) and Organization Chart (ICS 207).
K	Prepare appropriate parts of Assignment Lists (ICS 204).
L	Provide status reports to appropriate requesters.

DOCUMENTATION UNIT LEADER

The Documentation Unit Leader is responsible for maintaining accurate, up-to-date incident files such as: Incident Action Plan, incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of these documents may originate in other sections. This unit will ensure each section is maintaining and providing appropriate documents. Incident files will be stored for legal, analytical, and historical purposes. The Documentation Unit also provides duplication and copying services.

A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing and special instructions from Planning Section Chief.
D	Participate in Planning Meetings, as required.
E	Establish and organize incident files.
F	Establish duplication service and respond to requests.
G	File copies of all official forms and reports.
H	Check on accuracy and completeness of records submitted for files and correct errors or omissions by contacting appropriate ICS units.
I	Provide incident documentation to appropriate requesters.

DISPOSAL WASTE MANAGEMENT SPECIALIST

The Disposal (Waste Management) Specialist is responsible for providing the Planning Section Chief with a Disposal Plan that details the collection, sampling, monitoring, temporary storage, transportation, recycling, and disposal of all anticipated response wastes.

A	Review Common Responsibilities.
B	Determine resource needs.
C	Participate in planning meetings, as required.
D	Develop a Cleanup Plan and monitor cleanup operations, if appropriate.
E	Develop a detailed Waste Management Plan.
F	Calculate and verify the volume of petroleum recovered, including petroleum collected with sediment/sand, etc.
G	Provide status reports to appropriate requesters.
H	Maintain Unit/Activity Log (ICS 214).

LEGAL

The Legal Specialist will act in an advisory capacity during an oil spill response.

A	Review Common Responsibilities.
B	Participate in planning meetings, if requested.
C	Advise on legal issues relating to in-situ burning, dispersants, and other response technologies.
D	Advise on legal issues relating to Natural Resource Damage Assessment.
E	Advise on legal issues relating to investigation.
F	Advise on legal issues relating to finance and claims.
G	Advise on response related legal issues.
H	Maintain Unit/Activity Log (ICS 214).

HUMAN RESOURCES

The Human Resources Specialist is responsible for providing direct human resources services to the response organization, including ensuring compliance with all labor-related laws and regulations. If it is necessary to form a Human Resources Unit, it is normally in the Finance/Administration Section.

A	Review Common Responsibilities.
B	Provide a point of contact for incident personnel to discuss human resource issues and/or concerns.
C	Participate in daily briefings and planning meetings to provide appropriate human resource information.
D	Post human resource information, as appropriate.
E	Receive and address reports of inappropriate behavior, acts, or conditions through appropriate lines of authority.
F	Maintain Unit/Activity Log (ICS 214).

LOGISTICS SECTION CHIEF

The Logistics Section Chief, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident response. The Logistics Section Chief participates in developing and implementing the Incident Action Plan and activates and supervises Branches and Units within the Logistics Section.

A	Review Common Responsibilities.
B	Plan organization of Logistics Section.
C	Assign work locations and preliminary work tasks to Section personnel.
D	Notify Resources Unit of Logistics Section units activated including names and locations of assigned personnel.
E	Assemble and brief Branch Directors and Unit Leaders.
F	Participate in Repair Plan preparation.
G	Identify service and support requirements for planned and expected operations.
H	Coordinate and process requests for additional resources.
I	Advise on current service and support capabilities.
J	Prepare service and support elements of the Repair Plan.
K	Estimate future service and support requirements.
L	Ensure general welfare and safety of Logistics Section personnel.
M	Maintain Unit/Activity Log (ICS 214).

SERVICE BRANCH DIRECTOR

The Service Branch Director, when activated, is under the supervision of the Logistics Section Chief, and is responsible for managing all service activities at the incident. The Branch Director supervises the operations of the Communications, Medical, and Food Units.

A	Review Common Responsibilities.
B	Determine level of service required to support operations.
C	Confirm dispatch of Branch personnel.
D	Participate in planning meetings of Logistics Section personnel.
E	Review Repair Plan.
F	Coordinate activities of Service Branch Units.
G	Inform Logistics Section Chief of activities.
H	Resolve Service Branch problems.
I	Maintain Unit/Activity Log (ICS 214).

COMMUNICATIONS UNIT LEADER

	The Communications Unit Leader, under the direction of the Service Branch Director or Logistics Section Chief, is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing communications equipment; supervising the Incident Communications Center; distributing communications equipment to incident personnel; and communications equipment maintenance and repair.
A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing from Service Branch Director or Logistics Section Chief.
D	Determine unit personnel needs.
E	Advise on communications capabilities/limitations.
F	Ensure the Incident Communications Center and Message Center are established.
G	Set up telephone and public address systems.
H	Establish appropriate communications distribution/maintenance locations.
I	Ensure communications systems are installed and tested.
J	Ensure an equipment accountability system is established.
K	Ensure personal portable radio equipment is available.
L	Provide technical information, as required on: <ul style="list-style-type: none"> - Adequacy of communications systems currently in operation. - Geographic limitation on communications systems. - Equipment capabilities. - Amount and types of equipment available. - Anticipated problems in the use of communications equipment.
M	Supervise Communications Unit activities.
N	Maintain records on all communications equipment, as appropriate.
O	Ensure equipment is tested and repaired.
P	Recover equipment from relieved or released units.
Q	Maintain Unit/Activity Log (ICS 214).

SUPPORT BRANCH DIRECTOR

	The Support Branch Director, when activated, is under the direction of the Logistics Section Chief, and is responsible for developing and implementing logistics plans in support of the Repair Plan, including providing personnel, equipment, facilities, and supplies to support incident operations. The Support Branch Director supervises the operation of the Supply, Facilities, Ground Support, and Vessel Support Units.
A	Review Common Responsibilities.
B	Identify Support Branch personnel dispatched to the incident.
C	Determine initial support operations in coordination with Logistics Section Chief and Service Branch Director.
D	Prepare initial organization and assignments for support operations.
E	Determine resource needs.
F	Maintain surveillance of assigned unit work progress and inform Logistics Section Chief of activities.
G	Resolve problems associated with requests from Operations Section.
H	Maintain Unit/Activity Log (ICS 214).

SUPPLY UNIT LEADER

The Supply Unit Leader is primarily responsible for ordering personnel, equipment and supplies; receiving and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment.

A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain a briefing from the Support Branch Director or Logistics Section Chief.
D	Participate in Logistics Section/Support Branch planning activities.
F	Determine the type and amount of supplies enroute.
G	Arrange for receiving ordered supplies.
H	Review Repair Plan for information on operations of the Supply Unit.
I	Develop and implement safety and security requirements.
J	Order, receive, distribute, and store supplies and equipment and coordinate contracts and resource orders with the Finance Section.
K	Receive, and respond to, requests for personnel, supplies, and equipment.
L	Maintain inventory of supplies and equipment.
M	Coordinate service of reusable equipment.
N	Submit reports to the Support Branch Director.
O	Maintain Unit/Activity Log (ICS 214).

SECURITY MANAGER

The Security Manager is responsible to provide safeguards for protecting personnel and property from loss or damage.

A	Review Common Responsibilities.
B	Establish contacts with local law enforcement agencies, as required.
C	Contact Agency Representatives to discuss any special custodial requirements which may affect operations.
D	Request required personnel support to accomplish work assignments.
E	Ensure that support personnel are qualified to manage security problems.
F	Develop Security Plan for incident facilities.
G	Adjust Security Plan for personnel and equipment changes and releases.
H	Coordinate security activities with appropriate incident personnel.
I	Keep the peace, prevent assaults, and settle disputes by coordinating with Agency Representatives.
J	Prevent theft of government and personal property.
K	Document all complaints and suspicious occurrences.
L	Maintain Unit/Activity Log (ICS 214).

FINANCE / ADMINISTRATION SECTION CHIEF

The Finance/Administration Section Chief, a member of the General Staff, is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section.	
A	Review Common Responsibilities.
B	Attend briefing with responsible company/agency to gather information.
C	Attend planning meetings to gather information on overall strategy.
D	Determine resource needs.
E	Develop an operating plan for Finance/ Administration function on incident.
F	Prepare work objectives for subordinates, brief staff, make assignments, and evaluate performance.
G	Inform members of the Unified Command and General Staff when Section is fully operational.
H	Meet with assisting and cooperating company/agency representatives, as required.
I	Provide input in all planning sessions on financial and cost analysis matters.
J	Maintain daily contact with company/agency(s) administrative headquarters on finance matters.
K	Ensure that all personnel time records are transmitted to home company/agency according to policy.
L	Participate in all demobilization planning.
M	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
N	Brief agency administration personnel on all incident related business management issues needing attention and follow-up prior to leaving incident.
O	Insure proper authorization levels.
P	Have ability to cut checks locally.

COST UNIT LEADER

The Cost Unit Leader is responsible for collecting all cost data, performing cost-effectiveness analyses, and providing cost estimates and cost-saving recommendations for the incident.	
A	Obtain briefing from Finance/Administration Section Chief.
B	Coordinate with company/agency headquarters on cost-reporting procedures.
C	Obtain and record all cost data.
D	Prepare incident cost summaries.
E	Prepare resource-use cost estimates for Planning.
F	Make recommendations for cost-savings to Finance/Administration Section Chief.
G	Maintain cumulative incident cost records.
H	Ensure that all cost documents are accurately prepared.
I	Complete all records prior to demobilization.
J	Provide reports to Finance/Administration Section Chief.
K	Maintain Unit/Activity Log (ICS 214).

PROCUREMENT UNIT LEADER

	The Procurement Unit Leader is responsible for administering all financial matters pertaining to vendor contracts.
A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing from Finance/Administration Section Chief.
D	Contact appropriate unit leaders on incident needs and any special procedures.
E	Coordinate with local jurisdictions on plans and supply sources.
F	Prepare and sign contracts and land use agreements, as needed.
G	Draft memorandums of understanding.
H	Establish contracts with supply vendors, as required.
I	Interpret contracts/agreements and resolve claims or disputes within delegated authority.
J	Coordinate with Compensation/Claims Unit on procedures for handling claims.
K	Finalize all agreements and contracts.
L	Coordinate use of funds, as required.
M	Complete final processing and send documents for payment.
N	Coordinate cost data in contracts with Cost Unit Leader.
O	Maintain Unit/Activity Log (ICS 214).

COMPENSATION / CLAIMS UNIT LEADER

	The Compensation/Claims Unit Leader is responsible for the overall management and direction of all administrative matters pertaining to compensation-for-injury and claims-related activity for an incident.
A	Review Common Responsibilities.
B	Review Unit Leader Responsibilities.
C	Obtain briefing from Finance/Administration Section Chief.
D	Establish contact with Safety Officer, Liaison Officer and Company/Agency Representatives.
E	Determine the need for Compensation for Injury and Claims Specialists and order personnel, as needed.
F	If possible, allocate Compensation-for-Injury work area with the Medical Unit.
G	Coordinate with Procurement Unit on procedures for handling claims.
H	Periodically review documents produced by subordinates.
I	Obtain Demobilization Plan and ensure that Compensation-for-Injury and Claims Specialists are adequately briefed on Demobilization Plan.
J	Ensure that all Compensation-for-Injury and Claims documents are up to date and routed to the proper company/agency.
K	Maintain Unit/Activity Log (ICS 214).

OIL SPILL REMOVAL ORGANIZATION

	An Oil Spill Removal Organization (OSRO) is a third party environmental cleanup contractor capable of assisting in an oil spill response. Personnel should be trained in hazard recognition, oil contamination, oil containment, disposal & waste storage issues. In addition the roles & responsibilities for OSRO personnel are listed below:
A	Provide equipment as requested by the Company.
B	Provide manpower as requested by the Company.
C	Conduct daily safety meetings with employees on potential threats & chemicals.
D	Ensure personnel responding are properly trained.
E	Coordinate cleanup operations with Company personnel.
F	Assist in Unified Command requests.
G	Provide cost analysis upon request.