

To: NDPSC
From: OE2 North
Subject: PU-20-247 8" NGL and 20" Residue - As-built Alignment Submittal

The as-built alignments for PSC case number PU-20-247 8" NGL and 20" Residue Lines have been uploaded to the file transfer link provided by Adam Renfandt (below). Please let me know if there are any questions or issues accessing the files for review.

<https://apps.nd.gov/itd/filetransfer/uploadByInvitation.htm?id=1-c222f7a4044b4b78743c5a48b307b35b>

Thank you,
Will



[Will Sullivan](#)

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61 PU-20-247 Filed 08/10/2021 Pages: 11
As Built Maps and Specifications
Outrigger Energy
Will Sullivan

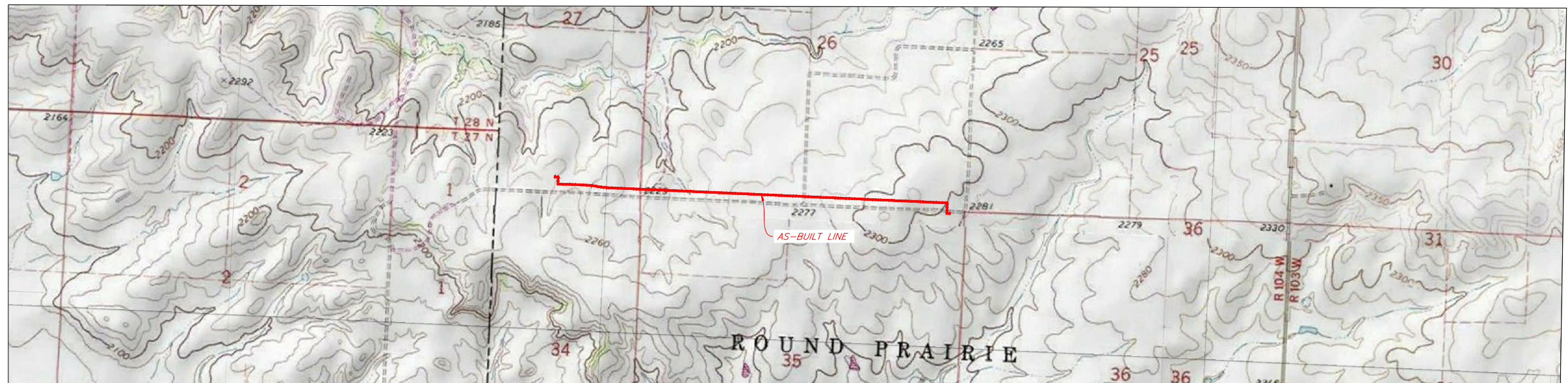
NGL 8" PIPELINE AS-BUILT

Located in:
SECTIONS 26, 27, & 35, T-154-N, R-104-W
WILLIAMS COUNTY, NORTH DAKOTA

NAD 83
NORTH DAKOTA
NORTH ZONE 3301

INDEX	
PG #	DESCRIPTION
1	INDEX
2	PLAN AND PROFILE (STA. 0+00.00 TO 67+33.15)
3	PIPE DETAILS AND COORDINATES

SUMMARY OF MATERIALS		
LINEAR FEET	3D FEET	DESCRIPTION
7'	8'	8.625", 0.322 wt, API-5L PSL2, HFW, Painted
4'	4'	8.625", 0.322 wt, MSS-SP75, SMLS, Painted
19'	26'	8.625", 0.322 wt, API-5L PSL2, HFW, Wrapped
15'	15'	8.625", 0.322 wt, MSS-SP75, SMLS, Wrapped
5259'	5262'	8.625", 0.250 wt, API-5L PSL2, HFW, 14-16 mils FBE
1,426'	1,430'	8.625", 0.250 wt, API-5L PSL2, HFW, 30 mils ARO
3'	3'	8.625", 0.250 wt, API-5L PSL2, HFW, Wrapped



VICINITY MAP

NOTES

CAUTION
IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG-TESS AND OTHER APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES. THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.

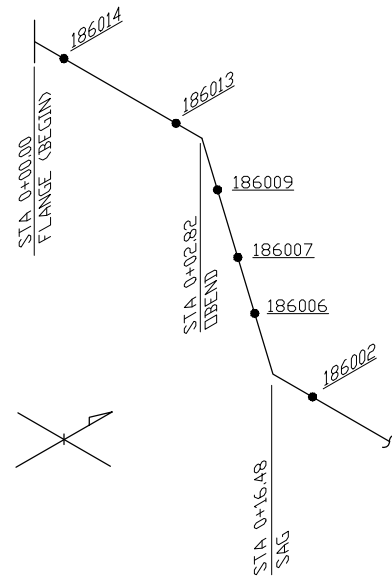


PRELIMINARY
USE ONLY

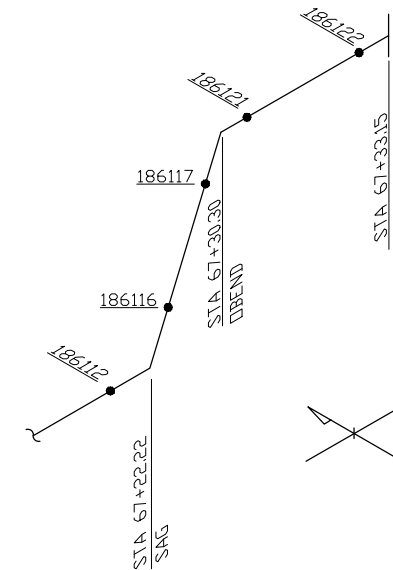
<p>NOTE:</p> <p>—Coordinates and bearings as shown are grid as derived from GPS observation and are based on State Plane Coordinates for the Colorado North Zone 0501 NAD 83.</p> <p>—Bore Depths are calculated from reports supplied from third party sources.</p>	<p>OE2 North LLC 1200 Seventeenth Street • Suite 900 • Denver, CO 80202 720-638-7312 voice • 720-612-4710 fax</p>	<p>NTB Associates, Inc. Surveyors 525 Louisiana Ave. Shreveport, LA 71101 Phone: (318) 226-9199 Fax: (318) 221-1208 Commercial Practice License No: 1535LS Exp. 12/31/2021</p>	<p style="font-size: 0.8em;">FIELD SURVEYED: 12/05/20 DRN: MVB DATE: 03/08/21</p> <p style="font-size: 0.8em;">SCALE: 1"=1000' CHKD: AGR DATE: 03/08/21</p> <p style="font-size: 0.8em;">DRAWING # REV</p> <p style="font-size: 0.8em;">20710-NGL-PIPELINE_ASBUILT DATE: 03/08/21 REV 0</p>
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ONLINE COORDINATE TABLE

STATION	POINT #	LATITUDE	LONGITUDE	NORTHING	EASTING	CODE
0+00.00	186015	48.126319436	-104.041374538	430730.28	1103934.54	FLANGE
0+01.93	90186013	48.126319175	-104.041366716	430730.10	1103936.44	TRANSITION
0+02.82	186011	48.126319245	-104.041363097	430730.09	1103937.32	BEND
0+03.68	90186009	48.126319129	-104.041359568	430730.00	1103938.18	TRANSITION
0+06.68	90186007	48.126319381	-104.041347288	430729.96	1103941.18	TRANSITION
0+16.06	90186006	48.126319354	-104.041308891	430729.52	1103950.55	TRANSITION
0+16.48	186004	48.126319418	-104.041307174	430729.52	1103950.97	BEND
0+20.25	90186001	48.126319251	-104.041291934	430729.29	1103954.69	TRANSITION
0+64.82	90185995	48.126320406	-104.041109457	430727.66	1103999.22	TRANSITION
0+66.50	185993	48.126318457	-104.041103231	430726.88	1104000.71	BEND
0+68.07	90185991	48.126314485	-104.041100704	430725.41	1104001.26	TRANSITION
0+71.12	90185990	48.126306119	-104.041100916	430722.36	1104001.07	TRANSITION
1+79.31	90186023	48.126009584	-104.041102293	430614.32	1103995.76	TRANSITION
1+80.99	186021	48.126005127	-104.041100515	430612.67	1103996.12	BEND
1+82.68	90186019	48.126003093	-104.041094284	430611.86	1103997.60	TRANSITION
7+32.79	128790	48.126005813	-104.038842211	430587.58	1104547.07	BEND
7+99.71	128796	48.125986603	-104.038569740	430577.52	1104613.22	BEND
9+39.36	128804	48.125946797	-104.038001270	430556.64	1104751.24	BEND
9+75.38	90128807	48.125944399	-104.037853821	430554.11	1104787.17	TRANSITION
17+52.64	90128751	48.125948120	-104.034671233	430519.78	1105563.67	TRANSITION
21+88.77	90128760	48.125950063	-104.032885434	430500.48	1105999.38	TRANSITION
25+84.22	90128666	48.125948663	-104.031266232	430481.83	1106394.38	TRANSITION
65+06.85	90128725	48.125957908	-104.015204801	430305.78	1110312.98	TRANSITION
65+08.60	128726	48.125956013	-104.015198204	430305.01	1110314.56	BEND
65+09.97	90128727	48.125952469	-104.015196347	430303.70	1110314.95	TRANSITION
65+27.70	90128729	48.125903872	-104.015198314	430286.01	1110313.66	TRANSITION
65+77.50	90128334	48.125767364	-104.015196848	430236.25	1110311.75	TRANSITION
66+73.33	90186106	48.125504659	-104.015194030	430140.49	1110308.06	TRANSITION
66+74.71	186108	48.125501136	-104.015192015	430139.19	1110308.50	BEND
66+76.27	90186110	48.125499102	-104.015186380	430138.38	1110309.84	TRANSITION
67+18.45	90186111	48.125494944	-104.015013788	430134.94	1110351.87	TRANSITION
67+21.58	90186112	48.125494587	-104.015000967	430134.67	1110355.00	TRANSITION
67+22.22	186114	48.125494803	-104.014998387	430134.72	1110355.63	BEND
67+22.80	90186116	48.125494306	-104.014996144	430134.51	1110356.17	TRANSITION
67+29.48	90186117	48.125493829	-104.014968780	430134.03	1110362.84	TRANSITION
67+30.30	186119	48.125493566	-104.014965446	430133.90	1110363.65	BEND
67+33.15	186123	48.125493444	-104.014953817	430133.73	1110366.48	FLANGE



BEGIN PIPELINE AS-BUILT
DETAIL A
SHEET 2 OF 3
STA 0+00.00 TO STA 0+17.13



END PIPELINE AS-BUILT
DETAIL B
SHEET 2 OF 3
STA 67+21.58 TO STA 67+33.15

NOTES

CAUTION
IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG-TESS AND OTHER APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES. THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.

	OETRIGGER ENERGY 1200 Seventeenth Street • Suite 900 • Denver, CO 80202 720-638-7312 voice • 720-612-4710 fax		
	NTB Associates, Inc. Surveyors 525 Louisiana Ave Shreveport, LA 71101 Phone: (318) 226-9199 Fax: (318) 221-1208 Commercial Practice License No.: 1535LS Exp. 12/31/2021		
NGL 8" PIPELINE AS-BUILT		FIELD SURVEYED: 12/05/20	DRN: MVB DATE: 03/08/21
		SCALE: N/A	CHKD: AGB DATE: 03/08/21
DRAWING # 20710-NGL-PIPELINE_ASBUILT		DATE: 03/08/21	REV 0

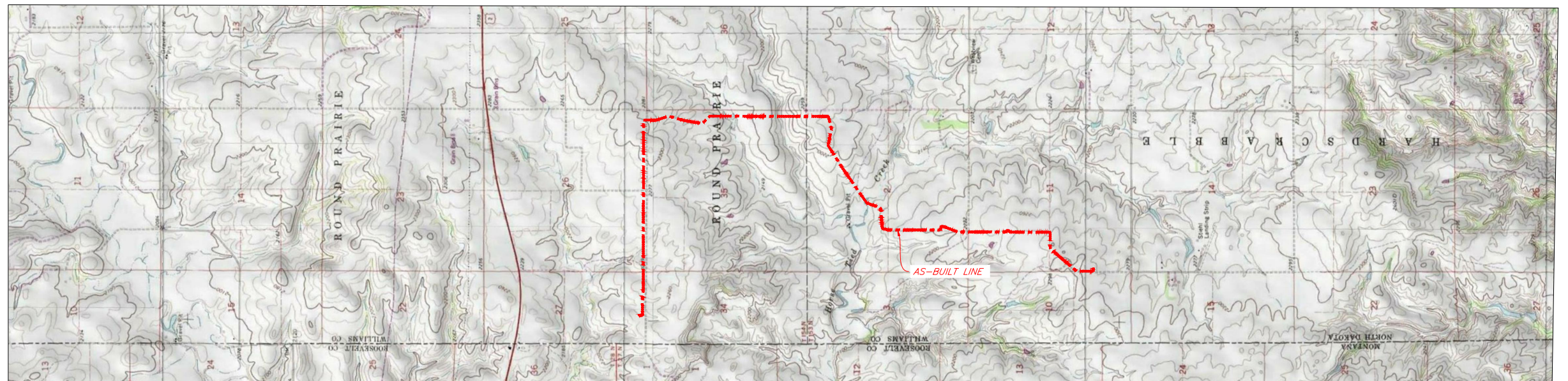
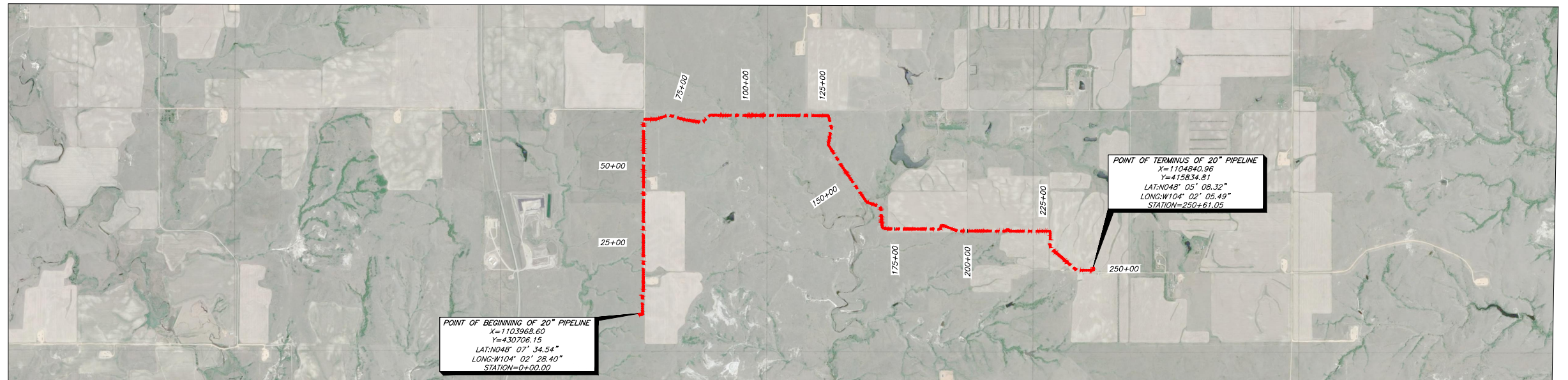
OE2 NORTH 20" RESIDUE PIPELINE AS-BUILT

Located in:
SECTIONS 26, 27, & 35, T-154-N, R-104-W
SECTIONS 2 & 11, T-153-N, R-104-W
WILLIAMS COUNTY, NORTH DAKOTA

NAD 83
NORTH DAKOTA
NORTH ZONE 3301

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PG #	DESCRIPTION
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3	PLAN AND PROFILE (STA. 69+00 TO 153+00)
4	PLAN AND PROFILE (STA. 153+00 TO 223+00)
5	PLAN AND PROFILE (STA. 223+00 TO 250+61.05)
6	COORDINATES
7	PIPE DETAILS

SUMMARY OF MATERIALS		
LINEAR FEET	3D FEET	DESCRIPTION
8'	9'	20.000", 0.625 wt, PSL2, APISL, PAINTED
27'	32'	20.000", 0.625 wt, PSL2, APISL, WRAPPED
31'	35'	20.000", 0.500 wt, PSL2, APISL, WRAPPED
764'	764'	20.000", 0.469 wt, PSL2, APISL, 14-16 mils FBE
7'	8'	20.000", 0.469 wt, PSL2, APISL, WRAPPED
20,362'	20,391'	20.000", 0.375 wt, PSL2, APISL, 14-16 mils FBE
373'	375'	20.000", 0.469 wt, PSL2, APISL, 30 mils ARO
3,375'	3,392'	20.000", 0.375 wt, PSL2, APISL, 30 mils ARO
91'	92'	20.000", 0.375 wt, PSL2, APISL, WRAPPED
9'	9'	20.000", 0.375 wt, MSS-SP75, WRAPPED
14'	14'	20.000", 0.500 wt, PSL2, APISL, PAINTED



VICINITY MAP

NOTES

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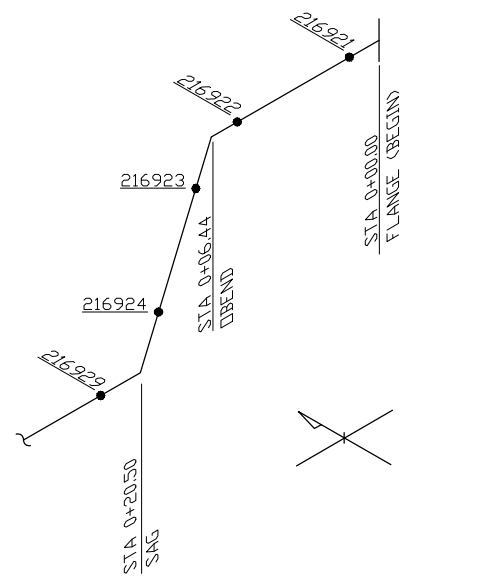
SHEET 1 OF 7

 OE2 North LLC 1200 Seventeenth Street • Suite 900 • Denver, CO 80202 720-638-7312 voice • 720-612-4710 fax	NTB Associates, Inc. Surveyors 525 Louisiana Ave. Shreveport, LA 71101 Phone: (318) 226-9199 Fax: (318) 221-1208 Commercial Practice License No: 1535LS Exp. 12/31/2021
OE2 NORTH 20" RESIDUE PIPELINE AS-BUILT	FIELD SURVEYED: 12/14/20 DRN: MVB DATE: 03/08/21 SCALE: 1" = 2000' CHKD: AGR DATE: 03/08/21
 GRAPHICAL SCALE: 1" = 2000'	DRAWING # REV 20702010-20IN-RESIDUE-ASBUILT DATE: 03/08/21 REV: 0

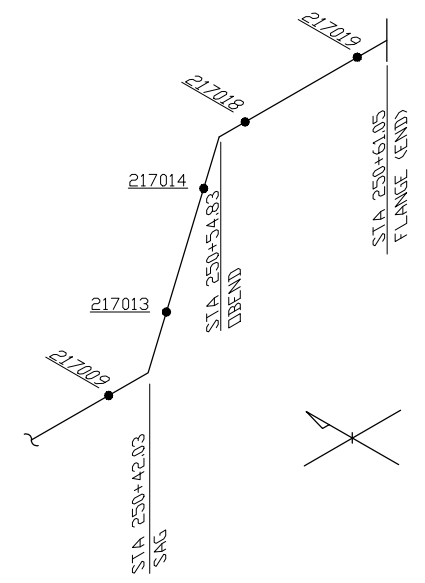
ONLINE COORDINATE TABLES

STATION	POINT #	LATITUDE	LONGITUDE	NORTHING	EASTING	CODE
0+00.00	216820	48.126257626	-104.041230644	430706.15	110368.60	FLANGE
0+06.44	217236	48.126257486	-104.041257020	430706.39	110362.17	BEND
0+08.06	90210923	48.126256932	-104.041268801	430706.26	110360.55	TRANSITION
0+20.50	216927	48.126256570	-104.041314531	430706.70	110398.67	BEND
0+27.97	90210930	48.126256192	-104.041345067	430706.91	110394.62	TRANSITION
0+34.59	90210931	48.126255568	-104.041372150	430706.91	110394.04	TRANSITION
0+48.12	216933	48.126255203	-104.041385828	430705.86	110390.05	BEND
0+82.42	90210935	48.126254168	-104.041391891	430702.43	110392.00	TRANSITION
0+88.67	90210937	48.126253973	-104.041392135	430695.70	110392.64	TRANSITION
1+40.51	90210950	48.125972743	-104.041386933	430683.91	110395.69	TRANSITION
1+44.13	238951	48.125962856	-104.041382070	430680.41	110396.72	BEND
1+48.19	90210952	48.125957673	-104.041367855	430598.38	110390.22	TRANSITION
3+42.74	90215439	48.125967135	-104.040207027	430582.88	1104124.68	TRANSITION
7+53.14	154317	48.125904848	-104.037995751	430542.60	1104751.95	BEND
9+72.76	154301	48.125904192	-104.037824237	430539.13	1104793.72	TRANSITION
10+14.68	90215429	48.125904316	-104.037105529	430531.11	1104969.06	TRANSITION
11+90.20	90215430	48.125905602	-104.033770025	430489.71	1105880.41	BEND
17+72.00	90215425	48.125904094	-104.034723257	430504.54	1105550.25	TRANSITION
18+03.56	154209	48.125904574	-104.034594041	430583.05	110581.78	BEND
20+80.74	154221	48.125905711	-104.034591135	430490.74	1106858.67	BEND
21+02.50	154223	48.125905602	-104.033770025	430489.71	1105880.41	BEND
21+13.41	90215425	48.125904094	-104.034723257	430488.65	1105891.28	TRANSITION
26+86.95	90215425	48.125904094	-104.034723257	430488.65	1105891.28	TRANSITION
28+36.72	256116	48.125903656	-104.030363769	430456.31	1106613.84	BEND
31+48.27	256102	48.125904937	-104.028976539	430461.47	1106862.07	BEND
34+94.30	256088	48.125906161	-104.027671280	430426.12	1107270.72	BEND
39+60.37	256278	48.125909840	-104.025280626	430400.65	1107829.60	BEND
40+53.72	256272	48.125909840	-104.025280626	430400.65	1107829.60	BEND
40+79.60	256270	48.125909840	-104.025280626	430400.65	1107829.60	BEND
41+77.06	256262	48.125909840	-104.025280626	430400.65	1107829.60	BEND
42+69.37	256256	48.125909840	-104.025280626	430400.65	1107829.60	BEND
44+61.92	256244	48.125909840	-104.025280626	430400.65	1107829.60	BEND
46+16.11	256238	48.125912626	-104.023077809	430377.13	1108391.45	BEND
47+88.45	256228	48.125911968	-104.022372254	430365.50	1108648.59	BEND
48+73.28	256220	48.125913002	-104.022024020	430365.50	1108648.59	BEND
55+00.50	256194	48.125913840	-104.019456675	430337.14	1109274.93	BEND
55+87.31	256186	48.125913550	-104.019101218	430333.07	1109361.64	BEND
56+54.82	256182	48.125913183	-104.018824803	430329.85	1109429.07	BEND
57+39.53	256178	48.125911688	-104.018477857	430325.44	1109513.67	BEND
57+94.81	256174	48.125911484	-104.018251596	430322.36	1109568.90	BEND
58+54.53	256170	48.125911342	-104.018070115	430321.15	1109628.58	BEND
58+85.13	256166	48.125914766	-104.017881812	430319.90	1109659.16	BEND
59+54.92	256162	48.125914982	-104.017714688	430311.42	1109846.32	BEND
60+72.48	256156	48.125914862	-104.017514688	430311.42	1109846.32	BEND
61+14.48	256152	48.125914518	-104.016942717	430309.34	1109888.26	BEND
61+78.98	256146	48.125912760	-104.016678644	430305.71	1109952.66	BEND
62+10.15	256142	48.125912794	-104.016551022	430304.34	1109983.80	BEND
63+40.98	256138	48.125913167	-104.016242444	430303.07	1110014.61	BEND
63+49.39	256134	48.125914651	-104.016226540	430301.40	1110062.99	BEND
63+33.26	256130	48.125914651	-104.016226540	430301.40	1110062.99	BEND
63+58.16	256126	48.125915802	-104.015816870	430297.26	1110162.93	BEND
64+89.43	256122	48.125915802	-104.015816870	430297.26	1110162.93	BEND
65+23.52	256118	48.125914426	-104.015289142	430290.63	1110292.69	TRANSITION
65+49.31	90215694	48.125903178	-104.015264792	430285.41	1110292.69	TRANSITION
66+83.48	90215698	48.125914226	-104.015289142	430299.73	1110292.69	BEND
67+72.92	256114	48.125926883	-104.015266583	430040.08	1110285.29	BEND
68+26.92	256108	48.125928856	-104.015289077	429986.15	1110282.91	BEND
68+75.60	256104	48.125928856	-104.015289077	429986.15	1110282.91	BEND
69+33.16	256100	48.124787606	-104.015267566	429980.02	1110278.18	BEND
69+70.43	256096	48.124689703	-104.015242127	429983.86	1110287.15	BEND
70+78.38	256092	48.124689703	-104.015242127	429983.86	1110287.15	BEND
70+87.38	256088	48.124368547	-104.015071416	429971.43	1110319.35	BEND
72+77.61	153971	48.123892836	-104.014818410	429968.88	1110372.87	BEND
73+57.14	90215975	48.123892836	-104.014744669	429972.22	1110394.78	TRANSITION
74+57.14	90215975	48.123892836	-104.014744669	429972.22	1110394.78	TRANSITION
75+26.75	90215990	48.123238525	-104.014900644	429911.44	1110341.92	TRANSITION
76+84.29	90215995	48.123232729	-104.015808334	429162.29	1110291.17	TRANSITION
78+05.23	153929	48.122937373	-104.015216037	429047.20	1110252.73	BEND
78+81.53	256148	48.123202888	-104.015297132	428974.91	1110229.60	BEND
80+34.24	256138	48.121889743	-104.015397587	428825.48	1110198.22	BEND
80+89.58	256134	48.121889743	-104.015397587	428825.48	1110198.22	BEND
81+49.75	256130	48.121577441	-104.015476126	428712.55	1110173.85	BEND
81+99.70	256126	48.121424281	-104.015511647	428663.80	1110162.94	BEND
82+92.68	256122	48.121336445	-104.015571793	428572.74	1110144.20	BEND
83+35.27	256118	48.121076515	-104.015599225	428511.06	1110135.46	BEND
84+17.47	256114	48.121000228	-104.015618057	428503.79	1110129.61	BEND
84+85.64	90215613	48.120656836	-104.015633741	428450.73	1110118.02	BEND
84+90.32	90215617	48.120656836	-104.015633741	428450.73	1110118.02	BEND
86+43.20	256110	48.120359649	-104.015323261	428366.29	1110208.18	BEND
87+70.92	256106	48.120005188	-104.014723883	428311.23	1110331.22	TRANSITION
88+27.86	256102	48.120007733	-104.014719801	428293.56	1110322.22	BEND
89+29.79	90215639	48.119995521	-104.014718084	428217.65	1110332.48	TRANSITION
92+13.47	154163	48.118948733	-104.014714921	427744.34	1110315.74	BEND
92+67.63	154167	48.118948733	-104.014714921	427744.34	1110315.74	BEND
92+78.66	902154169	48.118765085	-104.014715886	427679.25	1110312.53	TRANSITION
94+10.43	902154171	48.118403948	-104.014715554	427547.61	1110306.60	TRANSITION
96+05.00	902157786	48.117970484	-104.014714188	427353.27	1110297.26	TRANSITION
96+23.06	902154026	48.117820977	-104.014711006	427335.23	1110296.52	TRANSITION
100+69.76	256148	48.116596224	-104.014744190	426888.36	1110276.85	BEND
101+72.44	256144	48.116438280	-104.014715528	426831.35	1110273.89	BEND
101+76.21	256140	48.116304589	-104.014716947	426782.64	1110271.46	BEND
102+14.50	256137	48.116199645	-104.014717032	426744.41	1110269.55	BEND
103+28.27	256149	48.116144171	-104.014717489	426724.20	1110268.51	BEND
104+56.29	154181	48.115536810	-104.014719411	426630.77	1110263.92	BEND
104+97.47	154185	48.115428763	-104.014717656	426411.91	1110255.77	BEND
105+47.36	154189	48.115320862	-104.014717258	426387.56	1110253.19	BEND
105+71.73	154197	48.115216389	-104.014717980	426366.80	1110252.29	BEND
106+05.30	902154200	48.115128374	-104.014718482	426354.05	1110251.36	TRANSITION
116+96.01	902154128	48.112820826	-104.014716880	425324.40	1110204.72	TRANSITION
118+71.23	256709	48.116580296	-104.014711905	424860.89	1110184.43	BEND
121+56.83	256723	48.110875159	-104.014713108	424804.11	1110181.88	BEND
122+17.88	256735	48.110707913	-104.014711028	424743.11	1110179.60	BEND

STATION	POINT #	LATITUDE	LONGITUDE	NORTHING	EASTING	CODE
124+15.57	256791	48.110165876	-104.01709746	424545.61	1110170.89	BEND
124+84.08	256847	48.109979055	-104.014709486	424477.17	1110167.83	BEND
125+31.71	256848	48.109846589	-104.014709195	424429.39	1110165.74	BEND
126+99.75	90216669	48.109393335	-104.014710762	424363.75	1110157.77	TRANSITION
127+40.25	256671	48.109383114	-104.014714813	424260.43	1110156.62	BEND
127+40.23	90216673	48.109393335	-104.014725669	424259.20	1110153.91	TRANSITION
127+99.72	256661	48.109313292	-104.015103861	424239.32	1110160.52	BEND
130+56.08	256473	48.109131101	-104.016118107	424184.97	1109809.99	BEND
131+08.98	90216687	48.108995626	-104.016327288	424173.65	1109758.21	TRANSITION
131+10.10	256689	48.108949692	-104.016331172	424173.65	1109757.21	BEND
133+07.71	256501	48.109148493	-104.016723230	424197.33	1109862.57	BEND
133+69.37	256505	48.109180859	-104.016709255	424211.89	1109602.66	BEND
133+12.68	256509	48.109204572	-104.017144654	424222.47	1109560.66	BEND
133+63.90	256513	48.109231823	-104.017350332	424334.69	1109510.92	BEND
134+26.50	153871	48.109266223	-104.017601363	424250.03	1109450.03	BEND
134+46.38	153886	48.109360951	-104.018291809	424292.25	1109283.30	BEND
136+68.09	90213889	48.109400439	-104.018569749	424309.74	1109216.13	TRANSITION
136+70.15	153891	48.109400582	-104.018578172	424309.89	1109214.08	BEND
136+72.12	90213883	48.109398548	-104.018585626	424309.23	1109212.23	TRANSITION
138+89.97	256527</					



BEGIN PIPELINE AS-BUILT
 DETAIL A
 SHEET 2 OF 7
 STA 0+00.00 TO STA 0+21.70



END PIPELINE AS-BUILT
 DETAIL B
 SHEET 5 OF 7
 STA 250+40.59 TO STA 250+61.05

CAUTION
 IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG-TESS AND OTHER APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES. THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.

 OE2 North LLC 1200 Seventeenth Street • Suite 900 • Denver, CO 80202 720-638-7312 voice • 720-612-4710 fax	 NTB Associates, Inc. Surveyors 525 Louisiana Ave. Shreveport, LA 71101 Phone: (318) 226-9199 Fax: (318) 221-1208 Commercial Practice License No.: 1535LS Exp. 12/31/2021	
	FIELD SURVEYED: 12/14/20 SCALE: N/A DRAWING # 20702010-200N-RESIDUE-ASBUILT	DRN: MVB CHKD: AGB DATE: 03/08/21