

LEONARDITE PRODUCTS-LLC

October 4, 2015

James R. Deutsch, Director
Reclamation Division
Public Service Commission
600 East Boulevard Ave. Dept. 408
Bismarck, ND 58505-0480

Renewal Application
Stony Creek Mine GRGR-0501
Section 8, Township 154N, Range 100W
Williams County
111.15 acres


Dear Director Deutsch,

Leonardite Products is applying for a renewal of mining permit GRGR 0501 for an additional five years expiring in 2020. The current five year permit term expires November 2, 2015.

The information in this mailing includes an updated summary and corrected documents for Leonardite Products Revision 7 to the Stony Creek mine plan.

Previous to this mailing, we submitted the affidavit of publication from the Williston Herald for the public notice for the mine renewal and the letter of credit with corresponding PSC forms and exhibits required to increase our reclamation bond.

Thank you for your consideration.

Regards,


Cherie Harms
President
PO Box 548
13375 Hwy 1804
Williston, ND 58802
701-471-2704 cell
Cherie@leonarditeproducts.com

7 RC-15-516 Filed 10/09/2015 Pages: 15
Response to the technical review letter and new collateral bond filed by the applicant
Leonardite Products LLC
Cherie Harms

7 RC-15-515 Filed 10/09/2015 Pages: 15
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Leonardite Products
Revision 7 Summary
GRGR-0501- Stony Creek Mine
September 2015

The purpose of this revision is to reflect the changes in the mining plan due to the approval of Revision 6, identify the five year commercial leonardite subarea and to update the mining permit for Renewal No. 2.

The updates are itemized below:

II. Legal Requirements

L-1: Areas unsuitable for mining

Bullet Four: Pointed out the primary haul road is no longer in the permit area.

Bullet Six: Mentioned the archeological site is no longer in the permit area.

Mineral Lease Agreement

Updated the surface ownership to Ellis-Olson LLC, in second line

L-3: Leonardite (Coal Lease) Holders Section 8

Added a third line in the fourth section down on this page to reveal the deleted parcel approved in Revision 6

The owners of Section 8 SE1/4SW1/4 have changed.

L-4: Business Entity Information

The ownership percentages among the owners has changed and one owner has been deleted since the last revision.

The last paragraph on this page has been update to reflect that change.

IV. Environmental Resources

Table E-1: This table was updated to correct the actual size and topsoil, subsoil and spoil volumes removed and to propose the future mining sequence and estimates for same.

E-2: Cultural, Historical and Archeological Features

Two sentences were added after paragraph one to reflect the acreage deleted from the parcel as approved with Revision 6 and to indicate the archeological feature is no longer within the mining permit area.

E-7: Pre-Mining Vegetation and Land Use Information

In the fourth paragraph on this page, the dates of the Williams County commission and Planning and Zoning meetings were corrected.

Also in paragraph four, typos (May to Map) were corrected and a duplicated sentence was removed.

Paragraph five was added to reflect the approval of the deleted parcel in Revision 6 and that 14.28 acres were removed from the lease for the purpose of an oil drilling pad.

V. Operations Plan

O-1:

Type of Mine Equipment to be Used:

In the first paragraph the word commercial was added before the word leonardite to reflect the changes in definition to the ND Century Code when reporting to Leonardite.

Glacial Till-Uniform Overburden

Again, the term coal has been removed and replaced with commercial leonardite on the last three words in this section and a period has been added.

O-1:

Topsoil/Spoil Removal and Stockpiling

In the second paragraph of this section, an explanation of current practices for avoiding erosion have been added.

The location of the spoil piles for Pit B-1 are included in this section.

A paragraph near the end of this section has been removed due to the change of point mine use and only one land owner.

Description of Mining Operations

A pit number has been corrected in the middle of the paragraph, sixth line from A-1 to A-3.

The general reclamation plan has been revised and explained in the last sentence on O-2.

The activities in Pit F-3 were recorded as happened. The explanation is no longer in future tense.

Mining and Reclamation Sequence

Table O-1: This table has been updated to reveal the previous mining sequence and the projected sequence.

Waiver Request

The waiver request has a new section to request a reclamation extension for the duration of the mining plan.

VI. Reclamation Plan

R-2:

Commercial Leonardite Conservation

The word coal was changed to commercial leonardite or leonardite in the last paragraph of this page to coincide with the change of coal and commercial leonardite definitions to the ND Century Code.

R-7 and R-8:

Reclamation costs

Reclamation costs have been recalculated to coincide with the mining and reclamation sequence.

VII. Exhibits

Current certificate of liability insurance form has been included in Exhibit J.

IX. Maps

Maps B, C, D, G, H, and E-3 I have been revised to be consistent with the deleted parcel approved in Revision #6.

Map E-3 the soil map is also included.

SE1/4NE1/4 Section 7

Wilbert and Irene Koch, 10792 Sourdough Road, Belle Fourche, SD 57717
James Christianson, PO Box 297, Williston, ND 58801

NE1/4NE1/4 Section 7

Michael and Donna Hansen, 5277 134th Ave. NW, Williston, ND 58801
Kimberly Lester, Remainderman - Harvey Eustis Life Estate-13421 53rd St. NW Williston, ND 58801
Rory Koch, 5297 134th St NW, Williston, ND 58801
Edgar M. Boyd Post No. 37 of the American Legion, PO Box 1161, Williston, ND 58801
Adrian L. Cotton, 13436 53rd St. NW, Williston, ND 58801
Anthony Hurt, 13450 53rd St. NW, Williston, ND 58801
James and Joanne Cozart, 13452-53rd St. NW, Williston ND 58801
Verl and Ernestine Huravitch, 13444 53rd. St NW, Williston, ND 58801
Darren Lee Logan, 923 West Broadway, Williston, ND 58801
Harold Hanson, 13434 53rd St NW, Williston, ND 588013
Denver and De Etta Alton, 1104 4th St. West, Williston, ND 58801
Walter Ramsey, Trustees John and Patrick Ramsey, 312 Elk St., Alexander, ND 58831
John Ramsey, 312 Elk St., Alexander, ND 58831
Betty Jo McNary, 13420 53rd St. NW, Williston, ND 58801
Vernon and Juanetta Miller, 13418 53rd St. NW, Williston, ND 58801

Section 8

SW1/4NW1/4NW1/4 – Ida Beckett, 5284-134th Ave. NW, Williston, ND 58801
SE1/4NW1/4NW1/4- Juliana Reeves, 13381 53rd Lane NW, Williston, ND 58801
N1/2NW1/4NW1/4 – Neal Falk, 5296 134th Ave NW, Williston, ND 58801
NE1/4NW1/4 –Mark Ellis, 5658 133rd Ave NW, Williston, ND 58801
NW1/4NE1/4 – Mark Ellis, 5658 133rd Ave NW, Williston, ND 58801
SW1/4NE1/4 – Rodney and Teri Nelson, 4905-44th St. Almont, ND 58520
SE1/4 – Mark and Shelley Ellis, 5658 133rd Ave NW, Williston, ND 58801
SE1/4SW1/4 – City of Williston, PO Box 1306, Williston ND 58802
S1/2NW1/4; N1/2SW1/4; SW1/4SW1/4 – Ellis Olson, LLC 5166 134th Ave. NW, Williston, ND 58801
Lorin & Lucille Olson, 40 Gold Pan Lane, Billings, MT 59105
Lance & Jennifer Olson, 5166 134th Ave NW, Williston, ND 58801
Ellis Olson LLC now owns the section in the permit area. Brenda Berger, Linda Vallevik, Nancy Houglund and Scott Ellis are members of the LLC yet do not own any of the surrounding property as other members of the Olson and Ellis families do. Ellis Olson LLC has been added to the list of owners and to Property Map C.

Leonardite (Coal Lease) holders Section 8

Leonardite Products, LLC, P O Box 548, Williston, ND 58502-0548
N1/2SW1/4 – minus 34 acres of deleted parcel Leonardite Products
S1/2NW1/4 – minus 14.28 acres of deleted parcel Leonardite Products

Coal Owners

Section 8

NW1/4; SW1/4 SW1/4; N1/2SW1/4; SE1/4; W1/2NE1/4
and

Section 7

E1/2NE1/4; SE1/4SE1/4, NE1/4SE1/4

Bureau of Land Management, 5001 Southgate Drive, Billings, MT 59101-4669

Section 8

SE1/4SW1/4

Constance P. Ryan, c/o Roger C. Ryan, 3865 43rd Ave. NE, Seattle, WA 98105
Charlotte Friis, 1806 101st Place NE, Unit H3, Bellevue, WA 98004

Name of Mine

The mine name will be Stony Creek Mine.

MSHA Number

The MSHA identification number is I.D. #32-00652.

Business Entity Information

Leonardite Products, LLC
A North Dakota Limited Liability Company

Cherie Harms, President
815 N Mandan Street
Bismarck, North Dakota 58501
701-471-2704

Joe Murphy, Vice President
4117 Santa Barbara Drive
Sebring, FL 33875
863-446-0146

Karl Merk, Secretary/Treasurer
1619 9th Ave. West
Williston, ND 58801

Rodney Smith Estate
(In Probate)

Beezer Roussel, Governor
Global Minerals, LLC
535 Magnolia Wood Avenue
Baton Rouge, LA 70808
225-445-4439

Richard Monger, Governor
1828 Crest Street
Williston, ND 58801
701-572-7223

Herbert Williamson, Member
1005 6th Ave West
Williston, ND 58801

Gregory Monger, Member
4414 Hi-Line Road
Gillette, WY 82718

Mike Monger, Member
1401 O'Shannon Dr.
Gillette, WY 82716

Jim Scallon, Member
409 First Avenue West
Williston, ND 58801

Craig Mahlum, Member
2505 6th Avenue East
Williston, ND 58801

Allen Gardner, Member
4816 Southview Drive NW
Williston, ND 58801

Cherie Harms owns 29.45% Joe Murphy owns 16.8% of the memberships in Leonardite Products, LLC. The Rodney Smith Estate owns 9.88% of the memberships, Global Minerals LLC (Beezer Roussel) owns 11.52% and Karl Merk owns 8.02% of the memberships. The others, listed above, own 4.33% or less of the total memberships.

TABLE E-1

Mining Sub-area		Mining Year	Topsoil 1.5' (Cubic Yards)	Subsoil 1.5' (Cubic Yards)	Spoil (Cubic Yards)
A-1	1.72	2005-2013	32,718	12,374	29,475
A-2	1.75		3,755	1,942	18,962
A-3	1.47		4,150	4,150	29,475
B-1	1.75	2014-2016	10,947	9,457	29,990
B-2	1.90		4,089	4,089	29,818
B-3	1.44		4,089	4,089	29,818
C-1	1.82	2016-2017	4,277	4,277	31,189
C-2	1.81		4,583	4,583	33,417
C-3	1.81		3,384	3,384	24,677
D-1	1.82	2018-2019	4,277	4,277	31,189
D-2	1.79		4,207	4,207	30,675
D-3	1.77		4,160	4,160	30,332
E-1	1.84	2018	4,324	4,324	31,532
E-2	1.82		4,277	4,277	31,189
E-3	1.82		4,277	4,277	31,189
F-1	1.74	2018	4,089	4,089	29,818
F-2	1.75	2017	4,113	4,113	29,990
F-3	1.99	2013-2014	4,831	4,831	34,103
G-1	1.62	2019	3,807	3,807	27,762
G-2	1.65		3,878	3,878	28,276
G-3	1.63		3,831	3,831	27,933
H-1	1.66	2020	3,901	3,901	28,447
H-2	1.69		3,972	3,972	28,962
H-3	1.65		3,878	3,878	28,276
I-1	1.7	2020	3,995	3,995	29,133
I-2	1.68		3,948	3,948	28,790
I-3	1.66		3,901	3,901	28,447
J-1	1.45	2021	3,525	3,525	25,706
J-2	1.48		3,478	3,478	25,363
J-3	1.5		3,408	3,408	24,849
K-1	1.59	2021	3,831	3,831	27,933
K-2	1.62		3,807	3,807	27,762
K-3	1.63		3,737	3,737	27,248

OPERATIONS PLAN

Type of Mine Equipment to be Used

The permit area will be stripmined utilizing tractor-scrapers for topsoil and overburden removal, a 1-1/2 cubic yard pay loader to clean the commercial bed, and an 11-15-ton truck loaded by the pay loader to remove the commercial leonardite.

Glacial Till-Uniform Overburden

The top of the Glacial Till in the mine permit area begins at depths ranging from 11 to 60 inches according to the HPC 2005 Soil Survey. This contact is consistently identified by 1.) Color change, 2.) Discontinuation of organic materials, and 3.) The nearly prevalent existence of lime, detected by effervescence with 10% HcL. Lithologic observations by geologists indicate the till is a heterogeneous mixture of particle sizes ranging from clay to boulders, randomly distributed both laterally and vertically (See Exhibit F - Drill Hole Logs). Laboratory tests conducted on cuts from drill-hole samples demonstrate chemical inconsistencies throughout the permit area. Electric logs demonstrate the uniform character of the Glacial Till with the exception of caliper inconsistencies. The company concludes, based upon the preceding discussion that this strip mining process should consist of a three-lift operation. Lift 1 - Removal of topsoil or suitable plant growth material to the depth prescribed by the professional soil classifier. Lift 2 - Removal of subsoil to the depth prescribed by the professional soil classifier. Lift 3 - Removal and consolidation of the thin glacial till/overburden to the top of the top commercial leonardite layer

Topsoil/Spoil Removal and Stockpiling

The stockpiling of both topsoil, subsoil and spoil are illustrated on Map D (Mine Plan). In the permit area a number of locations have been identified for the storage of topsoil, subsoil and spoil. Topsoil and subsoil piles are to be located east of Subareas D, E, F, J and K. Two Spoil stockpiles will be located east of Subarea A and Subarea G. The Stockpile for Pit B-1 is south and west of Pit B-1 and indicated as such on the Mine Plan Map D. All of these areas have gentle topographic depressions, thereby helping to naturally reducing potential runoff. In addition, scraper basins, containment burros and straw bale dikes will also be used to provide runoff controls. (See Map D - Mine Plan).

When possible, stockpiles will be located in topographic depressions, and always in non-Leonardite removal areas. Stockpiles, when and where necessary, shall be surrounded with scraper basins of sufficient dimensions to prevent runoff. Topsoil will be removed and stockpiled from all haul roads and the areas where overburden will be stockpiled. Every stockpile will be marked at all times except when equipment is actually working on it. A completed stockpile that

is expected to remain for more than one growing season will be seeded with a perennial species to reduce wind and water erosion. Due to the seasonal challenges, stockpiles created after the growing season and prior to successful seeding will be protected from erosion with “snow fences” or straw waddles. Annually, stock-piles will be inventoried for location, condition, and volume. 69-05.2-09-02 Operations Maps and Plans, refer to Maps A, B, D, G, H & I.

Description of Mining Operations

The mining operation was designed to remove economic deposits of Leonardite from the permit area. This area will be mined from South to North in stages. Mining and reclamation of this permit will vary from the original plan because of development in the Williston area due to the Bakken oil play. Stage one (Subareas A-1 through F-3) started with removal and stockpiling of topsoil, subsoil and spoil from Subarea A-1. While staying close to the original plan, the sequence has changed. Rather than follow the Subarea alphabetically and numerically there has been some adjustments in sequence to accommodate the possibility of an inert landfill going into selected pits after they have been mined of leonardite. The land owners are eager to develop the area within the permit area close to the county highway. Leonardite Products LLC is working with the landowners and landfill operator to accommodate their requests. Following the original plan, as each subsequent Subarea is opened up, topsoil and subsoil will be stockpiled into separate piles and the spoil backfilled into the previous Subarea (ie. Subarea A-2 backfilled into Subarea A-1, etc). Subarea F-3 was filled in with the spoil stockpile removed from Subarea B-1. You’ll notice new SPGM piles to the west and south of Subarea B-1. The purpose of these additional piles is to keep material out of the mined pits as we wait for determination from the North Dakota Department of Health decision for the inert landfill. Stage two (Subareas G-1 through K-3) will be conducted in a like manner beginning with the stockpiling of topsoil, subsoil and spoil from Subarea G-1. As each new pit is opened the spoil will be backfilled into the previous pit. After mining operations are completed in Subarea K-3 will be filled in with the spoil stockpiled from Subarea G-1. Final grading, respread of subsoil, topsoil and vegetation will be completed within 12 months after each pit is completely mined out. The basic concept of the original plan remains, however, the reclamation sequence has been changed due to the change in the mining sequence, the anticipation of the ND Health Department approving the mined pits as an inert landfill and the commercialization of the land in the permit area. These changes are outlined in a revised Table O-1 and can be identified on Map D (Mine Plan Map).

Mining and Reclamation Sequence

Mining Sub-area	Size Acres	Begin	End	Rough	Final Grading and Subsoil	Topsoil Respread and
		Mining Qtr/Yr	Mining Qtr/Yr	Grading Qtr/Yr	Respresd Qtr/Yr	Qtr/Yr
A-1	1.72	3/2005	3/2009	3/2013	3/2016	3/2016
A-2	1.75	3/2009	4/2010	3/2014	3/2016	3/2016
A-3	1.47	4/2012	2/2013	3/2014	3/2016	3/2016
B-1	1.75	2/2014	3/2015	1/2016	2/2017	3/2017
B-2	1.9	1/2016	2/2106	2/2016	2/2017	3/2017
B-3	1.44	2/2016	3/2016	3/2016	2/2017	3/2017
C-1	1.82	3/2016	1/2017	1/2017	2/2017	3/2017
C-2	1.81	1/2017	2/2017	2/2017	2/2017	3/2017
C-3	1.81	2/2017	2/2017	2/2017	2/2017	3/2017
D-1	1.82	3/2019	3/2019	3/2019	3/2019	3/2019
D-2	1.79	2/2019	2/2019	3/2019	3/2019	3/2019
D-3	1.77	3/2018	1/2019	2/2019	3/2019	3/2019
E-1	1.84	2/2018	3/2018	3/2018	3/2018	3/2018
E-2	1.82	2/2018	2/2018	3/2018	3/2018	3/2018
E-3	1.82	1/2018	2/2018	2/2018	3/2018	3/2018
F-1	1.74	1/2018	2/2018	2/2018	3/2018	3/2018
F-2	1.75	2/2017	2/2017	2/2017	3/2018	3/2018
F-3	1.99	3/2013	2/2016	2/2016	3/2016	3/2016
G-1	1.62	3/2019	3/2019	4/2019	2/2020	2/2020
G-2	1.65	3/2019	3/2019	4/2019	2/2020	2/2020
G-3	1.63	3/2019	4/2019	4/2019	2/2020	2/2020
H-1	1.66	1/2020	2/2020	2/2020	3/2020	2/2021
H-2	1.69	2/2020	2/2020	3/2020	3/2020	2/2021
H-3	1.65	2/2020	2/2020	3/2020	3/2020	2/2021
I-1	1.7	2/2020	3/2020	3/2020	3/2020	2/2021
I-2	1.68	3/2020	3/2020	4/2020	4/2020	2/2021
I-3	1.66	3/2020	3/2020	4/2020	4/2020	2/2021
J-1	1.45	1/2021	1/2021	2/2021	4/2021	2/2022
J-2	1.48	2/2021	2/2021	3/2021	4/2021	2/2022
J-3	1.5	2/2021	2/2021	3/2021	4/2021	2/2022
K-1	1.59	3/2021	3/2021	3/2021	4/2021	2/2022
K-2	1.62	3/2021	3/2021	3/2021	4/2021	2/2022
K-3	1.63	3/2021	3/2021	3/2021	4/2021	2/2022

Table 0-1

July 30, 2010

Waiver Request

Submitted by Leonardite Products, Stony Creek Mine GRGR 0501

Cherie Harms 701471-2704

Waivers:

180 Day back-filling requirement, NDAC69-05.2-21-01 (2)

Three -year seeding requirement NDCC 38-14.10-24(14)

We'd like to extend the time requirement between the End of the Mining Year and the Topsoil Respread and Revegetation which affects both requirements listed above. On our Mining and Reclamation Sequence Table 0-1, you'll see the time between End of Mining and the Topsoil Respread and Revegetation has been extended to three and one quarter years to three and two quarter years.

This extension is necessary due to water problems in Pit A-1 at the end of June 2009. Due to water accumulating in the Pit A-1 that spring, it was impossible to remove all the Leonardite out of Pit A-1 before opening Pit A-2. When opening Pit A-2 the overburden from Pit A-2 went into Pit A-1. Because of the Leonardite still in the Pit A-1, there was not enough room for the overburden from Pit A-2 resulting in more height on what was Pit A-1. The former Pit A is not within grade for re-vegetation. The excess overburden in Pit A-1 will be pushed into pit A-2 when Pit A-3 is excavated. Pit A-3 will not be excavated until third quarter of 2011. Putting overburden in Pit A-2 from Pit A-1 will have to be completed before we can spread subsoil and top soil on Pit A-1. Following our mining plan, which is a rotation, subsequent Pit excavation and refilling will be delayed an additional year, from the original three, throughout this mining cycle.

At this point, Leonardite Products does not mine or excavate 12 months of the year, which also extends the time for backfilling and seeding.

September 30, 2015

Waiver Request

Submitted by Leonardite Products, Stony Creek Mine GRGR 0501

Cherie Harms 701471-2704

Waivers:

180 Day back-filling requirement, NDAC69-05.2-21-01 (2)

Three -year seeding requirement NDCC 38-14.10-24(14)

Leonardite Products LLC requests waivers from the backfilling and seeding requirements affecting both requirements above. Waivers would be appreciated for several reasons as explained below:

The property has been re zoned from agricultural to industrial by the landowners.

Chamley Pipe and Salvage has submitted an application for this inert landfill with the North Dakota Department of Health. The current mined and excavated pits A and F-3 may be used as an inert landfill. If the topsoil and sub soil were to be respread and seeded, it is very likely in 2016, the same pits would be stripped excavated again. . Keeping the topsoil and subsoil in stockpiles will conserve the quality and quantity of soil available.

The landowners have asked Leonardite Products to change the mining sequence by mining Pits B and C as soon as possible because they are hoping to use this area for commercial purposes. Once mined, the land owners will instruct and work with Leonardite Products to reclaim this land to their specifications.

RECLAMATION COSTS

Estimated costs for the following items have been determined assuming reclamation for permit term which would be in 2017 for Pits B-1-3, C1-3 and F-2. The worst case liability includes the following assumptions:

- The maximum overburden stockpile will be limited to 30,000 cubic yards.
- Final mining Subarea spoil replacement of largest Mining Subarea and final grading of the entire mine area.
- Final mining Subsoil Replacement for 1 Subareas and Associated Disturbed (16.9 acres total).
- Final mining Topsoil Replacement for 2 Subareas and Associated Disturbed (22.3 acres total).
- Replacement of suitable plant growth materials.
- Revegetation of Topsoiled areas and Associated Disturbance (22.3 acres total).

<u>Volume Assumption</u>				<u>Cubic Yards</u>
Final Mining Subarea Spoil Placement				30,000
Drainage Taper and Grading				53,542
Sub Total				83,542
Subsoil and Top Soil Replacement				
Mining area				
		acres	feet	
	Sub-soil	13.86	1.5	33,541
	Top Soil	16.9	1.5	40,898
Associated disturbed (including roads and Buffers)				
		acres	feet	
	Sub-soil	7.78	1.5	18,828
	Top Soil	7.78	1.5	18,828
Sub Total				112,094
Total				195,636
<u>Reclamation Summary</u>				
		cubic yards	cost per yard	
Soil Replacement		30,000	\$ 1.20	\$ 36,000
Drainage Tapering		53,542	\$ 1.20	\$ 64,250
Subsoil Replacement		52,369	\$ 1.20	\$ 62,843
Topsoil Replacement		59,726	\$ 1.20	\$ 71,671
Total		195,636		\$ 234,764

Revegetation Costs

The assumed standard cost for revegetation has been determined as follows:

Mulching	\$100.00	/acre
Seedbed Preparation	\$16.02	/acre
Fertilizer & Application	\$22.54	/acre
Seed & Application	\$33.40	/acre
Rock Picking	\$50.00	/acre
Total	\$221.96	

Mining Disturbance	16.90	acres	X	\$221.96	=	\$3751
Associated Disturbed	7.78	acres	X	\$221.96	=	\$1727
Total						\$5478

Total Reclamation Costs:

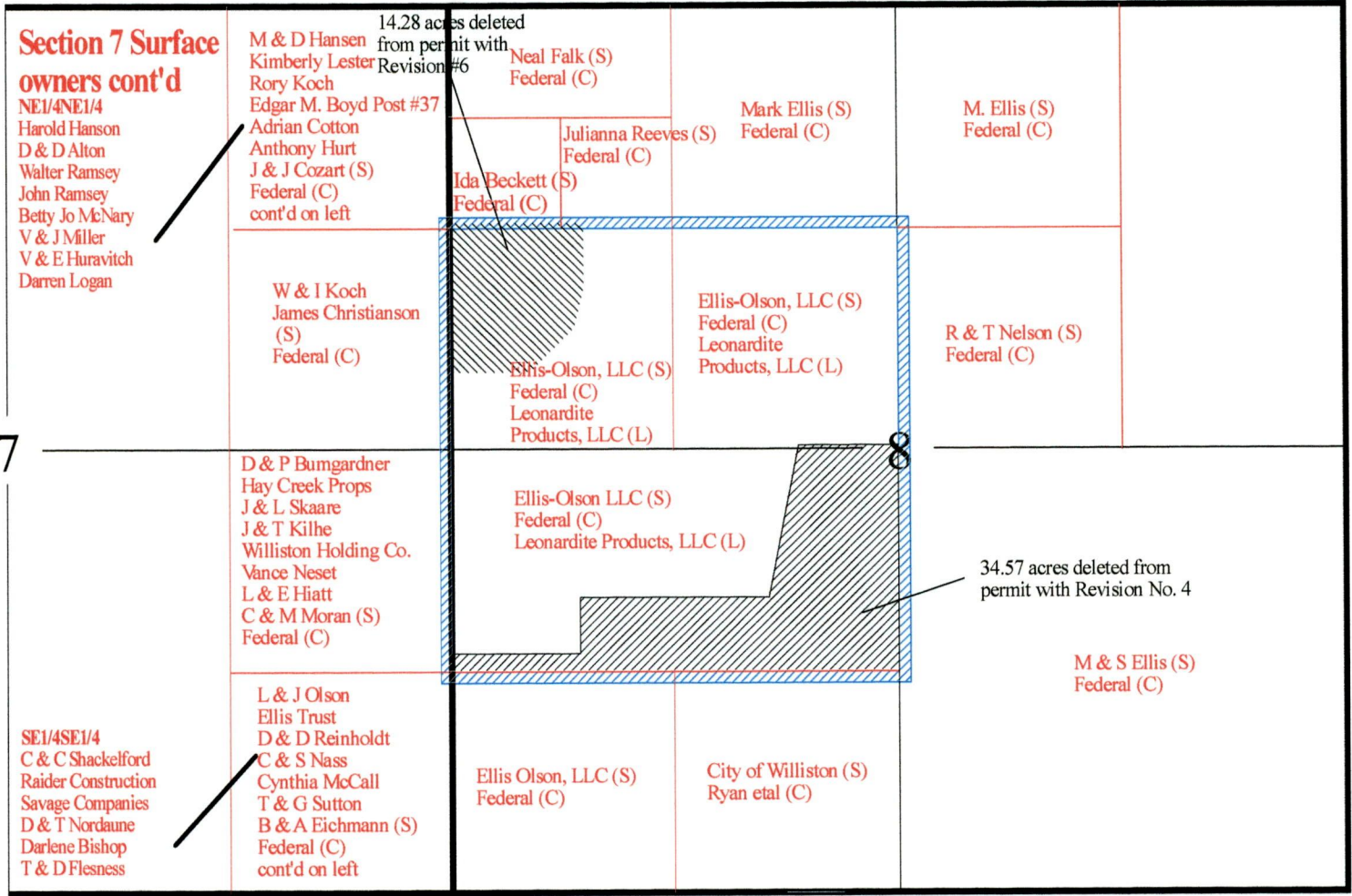
Overburden Handling and Tapering	\$ 234,764
Revegetation	\$ 5,478
Administrative, Engineering and Mobilization Costs	
Topographic Map Preparation (\$15/acre x 111.15 acres)	\$ 1,667
Preparation of Plans and Other Works (\$35/acre x 22.3 acres)	\$ 781
Mobilization and Demobilization <\$250,000	\$ 5,000
Field Supervision and Survey Costs (10% of earthmoving costs)	\$ 23,476
Misc. Expense - small mine (5% excluding admin and MOB costs)	\$ 10,192
Total	\$ 281,358

Revegetation Method

The following pure live seed mixture and rate of application shall be used when seeding disturbed areas:

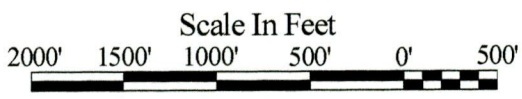
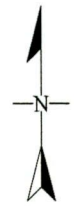
Alfalfa	6 lbs. PLS/acre
Pubescent or Intermediate Wheatgrass	8 lbs. PLS/acre
Nurse Crop of Oats	<u>10 lbs. PLS/acre</u>
	24 lbs. PLS/acre

If a change to this mixture is desirable, the Company will do so in conjunction with the approval of the Public Service Commission.

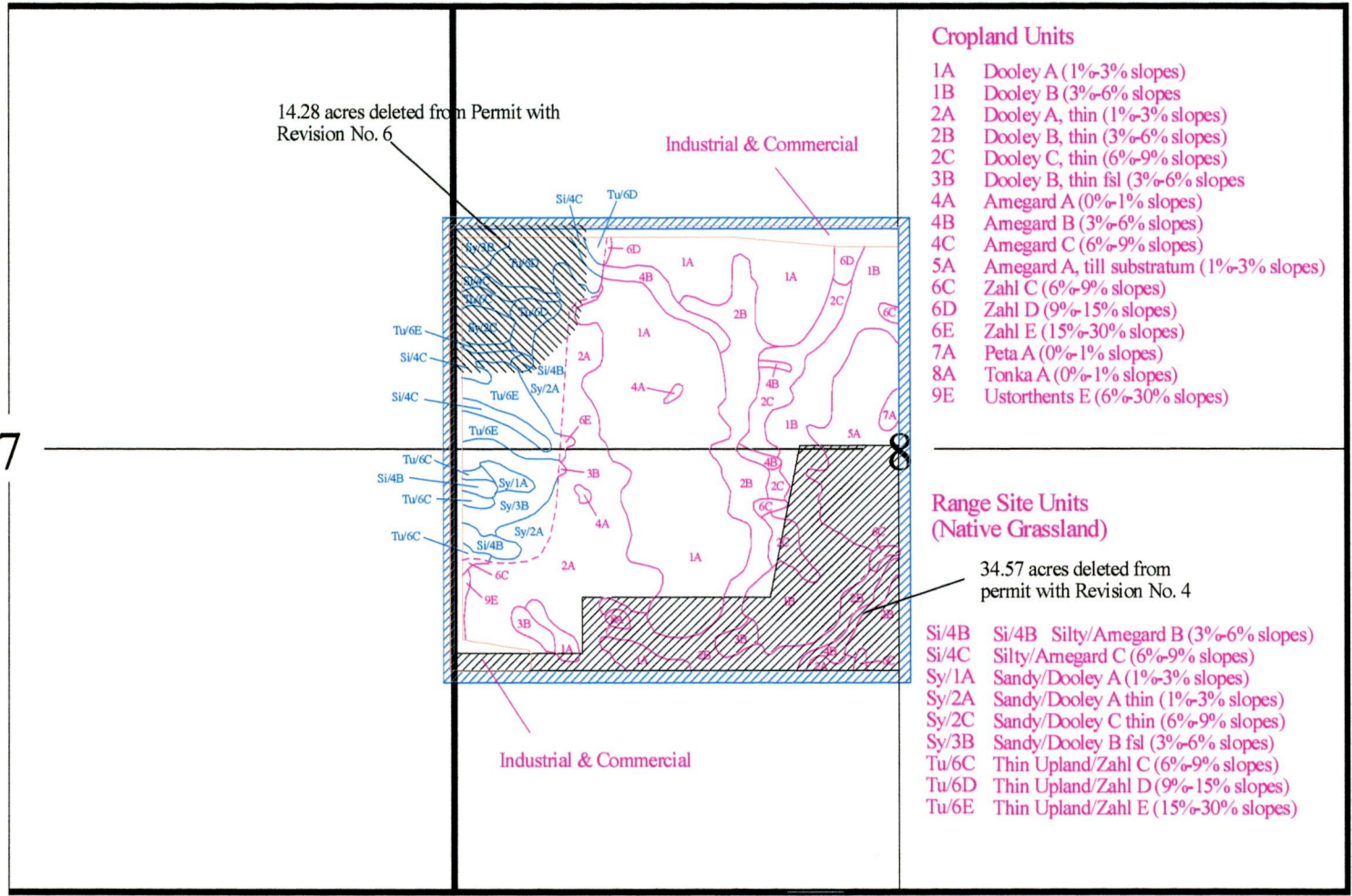


Legend

-  Permit Boundary
- (S) Surface Owner
- (C) Coal Owner
- (L) Lease



Leonardite Products	
Stony Creek Mine Mine Permit Application GRGR-0501 T 154 N, R 100 W Williams County, North Dakota	
Property Map - Map C	
Date: 07-28-15	By: JB/CH/MB



Cropland Units

- 1A Dooley A (1%-3% slopes)
- 1B Dooley B (3%-6% slopes)
- 2A Dooley A, thin (1%-3% slopes)
- 2B Dooley B, thin (3%-6% slopes)
- 2C Dooley C, thin (6%-9% slopes)
- 3B Dooley B, thin fsl (3%-6% slopes)
- 4A Amegard A (0%-1% slopes)
- 4B Amegard B (3%-6% slopes)
- 4C Amegard C (6%-9% slopes)
- 5A Amegard A, till substratum (1%-3% slopes)
- 6C Zahl C (6%-9% slopes)
- 6D Zahl D (9%-15% slopes)
- 6E Zahl E (15%-30% slopes)
- 7A Peta A (0%-1% slopes)
- 8A Tonka A (0%-1% slopes)
- 9E Ustorthents E (6%-30% slopes)

**Range Site Units
(Native Grassland)**

- Si/4B Si/4B Silty/Amegard B (3%-6% slopes)
- Si/4C Silty/Amegard C (6%-9% slopes)
- Sy/1A Sandy/Dooley A (1%-3% slopes)
- Sy/2A Sandy/Dooley A thin (1%-3% slopes)
- Sy/2C Sandy/Dooley C thin (6%-9% slopes)
- Sy/3B Sandy/Dooley B fsl (3%-6% slopes)
- Tu/6C Thin Upland/Zahl C (6%-9% slopes)
- Tu/6D Thin Upland/Zahl D (9%-15% slopes)
- Tu/6E Thin Upland/Zahl E (15%-30% slopes)

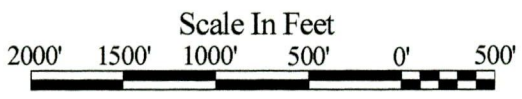
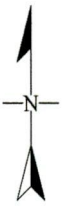
34.57 acres deleted from permit with Revision No. 4

14.28 acres deleted from Permit with Revision No. 6

Revision 7
Renewal 2
October 2015

Legend

Permit Boundary

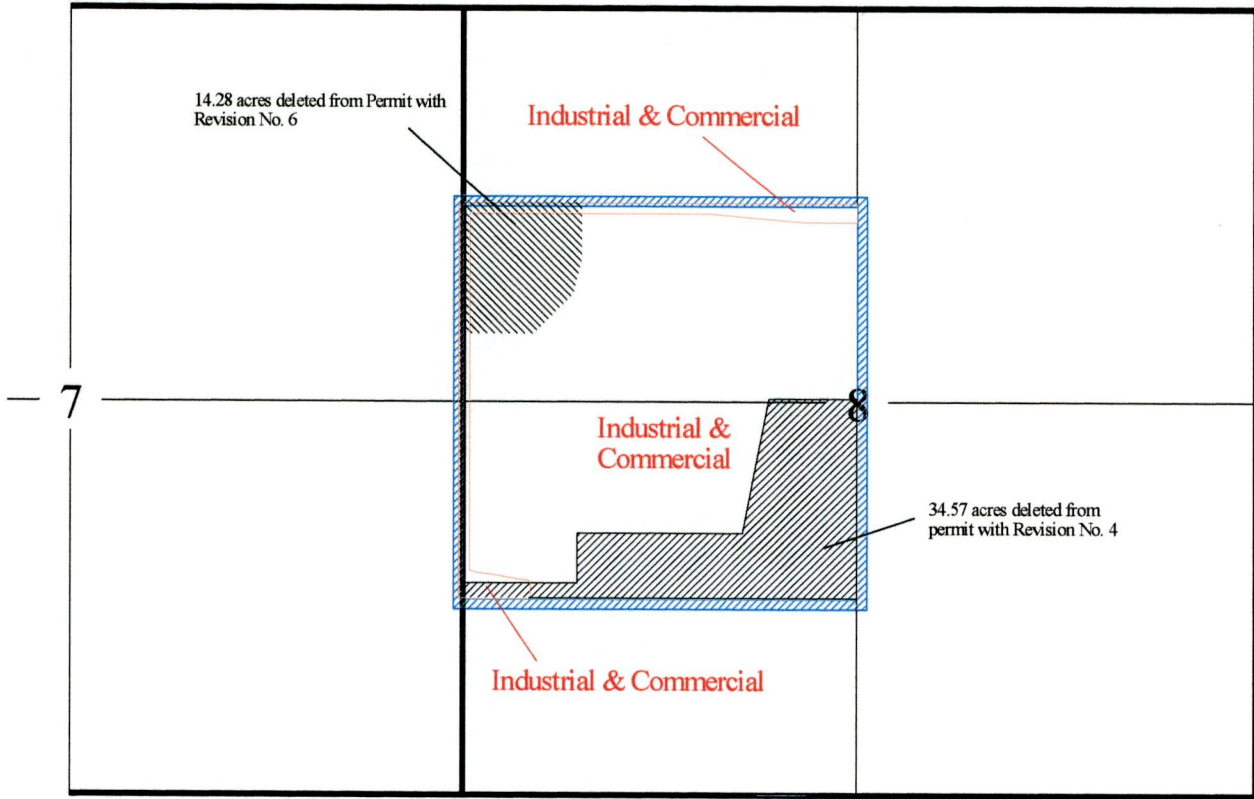


Leonardite Products

Stony Creek Mine
Mine Permit Application GRGR-0501
T 154 N, R 100 W
Williams County, North Dakota

**Soil Types and
Pre-Mine Land Use
Map E-3**

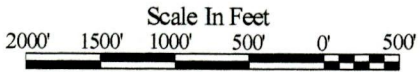
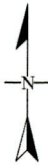
Date: **10-02-15** By: **JBJ/CH/MB**



Revision 7, Renewal2, 2015

Legend

 Permit Boundary



Leonardite Products	
Post-Mining Land Use Map I	
Date 09-28-2015	By: JBj/CH/MB