

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque, NM 87102



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Oil Conservation Division District IV
1220 South St. Francis Drive
Santa Fe, NM 87505

Reference Number: 87806.0003 FGA



MODRALL SPIERLING
LAWYERS

March 12, 2020

Deana M. Bennett
Deana.bennett@modrall.com
505-848-1834

VIA CERTIFIED MAIL

**Re: APPLICATION OF AWR DISPOSAL, LLC
TO APPROVE SALT WATER
DISPOSAL WELL IN LEA
COUNTY, NEW MEXICO.**

CASE NO. 21160

TO: AFFECTED PERSONS

This letter is to advise you that AWR Disposal, LLC ("AWR") has filed the enclosed application, which seeks an order approving the Feeling Good Again SWD #1 well at a surface location 1,495 feet from the North line and 227 feet from the East line of Section 28, Township 23 South, Range 35 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Applicant requests authorization to inject salt water into the Devonian-Silurian formation at a depth of 15,935'-17,567'. Applicant requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

This case is currently set for a hearing before a Division Examiner on April 2, 2020, starting at 8:15 a.m. The hearing will be held in Room 311, New Mexico State Capital Building, 490 Old Santa Fe Trail, Santa Fe, New Mexico. As a party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in the case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in the case at a later date.

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Modrall Spierling
Roehl Harris & Sisk P.A.

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New Mexico 87102

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF AWR DISPOSAL, LLC
TO APPROVE SALT WATER
DISPOSAL WELL IN LEA
COUNTY, NEW MEXICO.

CASE NO. 21160

APPLICATION

AWR Disposal, LLC ("AWR"), OGRID No. 328805, through its undersigned attorneys, hereby makes this application to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, AWR states as follows:

(1) AWR proposes to drill the Feeling Good Again SWD #1 well at a surface location 1495 feet from the North line and 227 feet from the East line of Section 28, Township 23 South, Range 35 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(2) AWR seeks authority to inject salt water into the Devonian-Silurian formation at a depth of 15,935' -17,567'.

(3) AWR intends to use 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) AWR anticipates using an average pressure of 2,383 psi for this well, and it requests that a maximum pressure of 3,187 psi be approved for the well.

(5) A proposed C-108 for the subject well is attached hereto in Attachment A.

CASE NO. ____ : Application of AWR Disposal, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving the Feeling Good Again SWD #1 well at a surface location 1,495 feet from the North line and 227 feet from the East line of Section 28, Township 23 South, Range 35 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Applicant requests authorization to inject salt water into the into the Devonian-Silurian formation at a depth of 15,935'-17,567'. Applicant requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said location is approximately 15.2 miles northwest of Jal, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No

II. OPERATOR: AWR DISPOSAL, LLC

ADDRESS: 3300 N. A Street, Ste 220, Midland, Texas 79705

CONTACT PARTY: Chris Weyand (Agent)

PHONE: 512-600-1764

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? Yes No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Christopher B. Weyand

TITLE: Consulting Engineer

SIGNATURE: _____

DATE: 2/4/2020

E-MAIL ADDRESS: chris@lonquist.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

INJECTION WELL DATA SHEET

Side 1

OPERATOR: AWR DISPOSAL, LLC

WELL NAME & NUMBER: FEELING GOOD AGAIN SWD #1

WELL LOCATION: 1495' FNL & 227' FEL H UNIT LETTER 28 SECTION 23S TOWNSHIP 35E RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA
Surface Casing

Hole Size: 30.000" Casing Size: 26.000"
Cemented with: 2.708 sx. or ft

Top of Cement: Surface Method Determined: Circulation

1st Intermediate Casing

Hole Size: 24.000" Casing Size: 20.000"
Cemented with: 4.601 sx. or ft

Top of Cement: Surface Method Determined: Circulation

2nd Intermediate Casing

Hole Size: 17.500" Casing Size: 13.375"
Cemented with: 4.066 sx. or ft

Top of Cement: Surface Method Determined: Circulation

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 7", 26 lb/ft, P-110, TCPC from 0' - 11,100' and 5,500", 17 lb/ft, P-110 TCPC from 11,100' - 15,895'
Lining Material: Duoline

Type of Packer: 7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

Packer Setting Depth: 15,895'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Devonian, Silurian, Fusselman and Montoya (Top 100')

3. Name of Field or Pool (if applicable). SWD: Devonian-Silurian

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Dclaware: 5,604'

Bone Spring: 9,713'

Wolfcamp: 11,622'

Atoka: 12,792'

Morrow: 13,478'

3. Tubing Description

Tubing Information		
OD	7"	5.5"
WT	0.362"	0.304"
ID	6.276"	4.892"
Drift ID	7.875"	6.050"
COD	6.151"	4.653"
Weight	26 lb/ft	17 lb/ft
Grade	P-110 TCPC	P-110 TCPC
Depth Set	0'-11,100'	11,100'-15,895'

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

B. Completion Information

1. Injection Formation: Devonian, Silurian, Fusselman, Montoya (Top 100')
2. Gross Injection Interval: 15,935' – 17,567'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	5,604'
Bone Spring	9,713'
Wolfcamp	11,622'
Atoka	12,792'
Morrow	13,478'

VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

A. Injection Zone: Siluro-Devonian Formation

Formation	Depth
Rustler Anhydrite	1,546'
Capitan Reef	4,662'
Delaware	5,604'
Bone Spring	8,799'
Wolfcamp	11,622'
Strawn	12,529'
Atoka	12,792'
Morrow	13,478'
Mississippian	15,223'
Woodford	15,672'
Devonian	15,885'
Montoya	17,467'

B. Underground Sources of Drinking Water

Four water wells exist within one mile of the proposed well location. These wells do not have any data on the New Mexico Water Rights Reporting System website, but water wells in the surrounding area have an average total depth of 593 ft and an average depth to water of 188 ft generally producing from the Santa Rosa. The upper Rustler may also be another USDW and will be protected. The Capitan reef and corresponding aquifer has been identified as a protectable water source, so an additional casing string will be set in the well.

XII. Affirmative Statement of Examination of Geologic and Engineering Data

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone (in the proposed Feeling Good Again SWD #1) and any underground sources of drinking water.

NAME: Herb Wacker

TITLE: Geologist

SIGNATURE: Herb Wacker
TOPG #4517

DATE: Nov 1, 2019

District I
1625 N French Dr., Hobbs NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 E First St., Artesia NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1000 E. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code 97869		3 Pool Name SWD DEVONIAN-SILURIAN	
4 Property Code		5 Property Name FEELING GOOD AGAIN SWD			6 Well Number 1
7 OGRID No. 328805		8 Operator Name AWR DISPOSAL, LLC			9 Elevation 3418'

10 Surface Location

11 L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	28	23-S	35-E	-	1495'	NORTH	227'	EAST	LEA

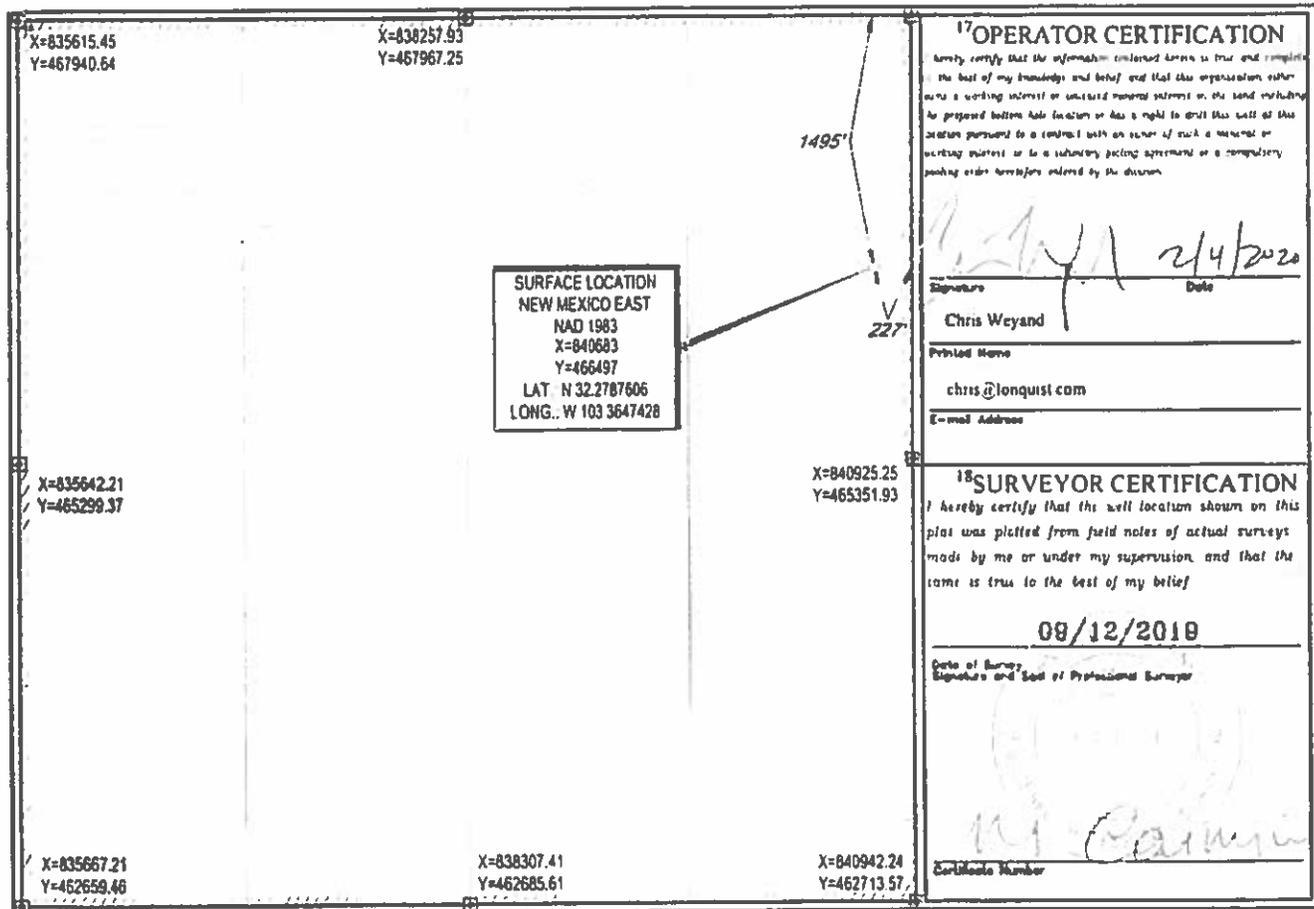
11 Bottom Hole Location If Different From Surface

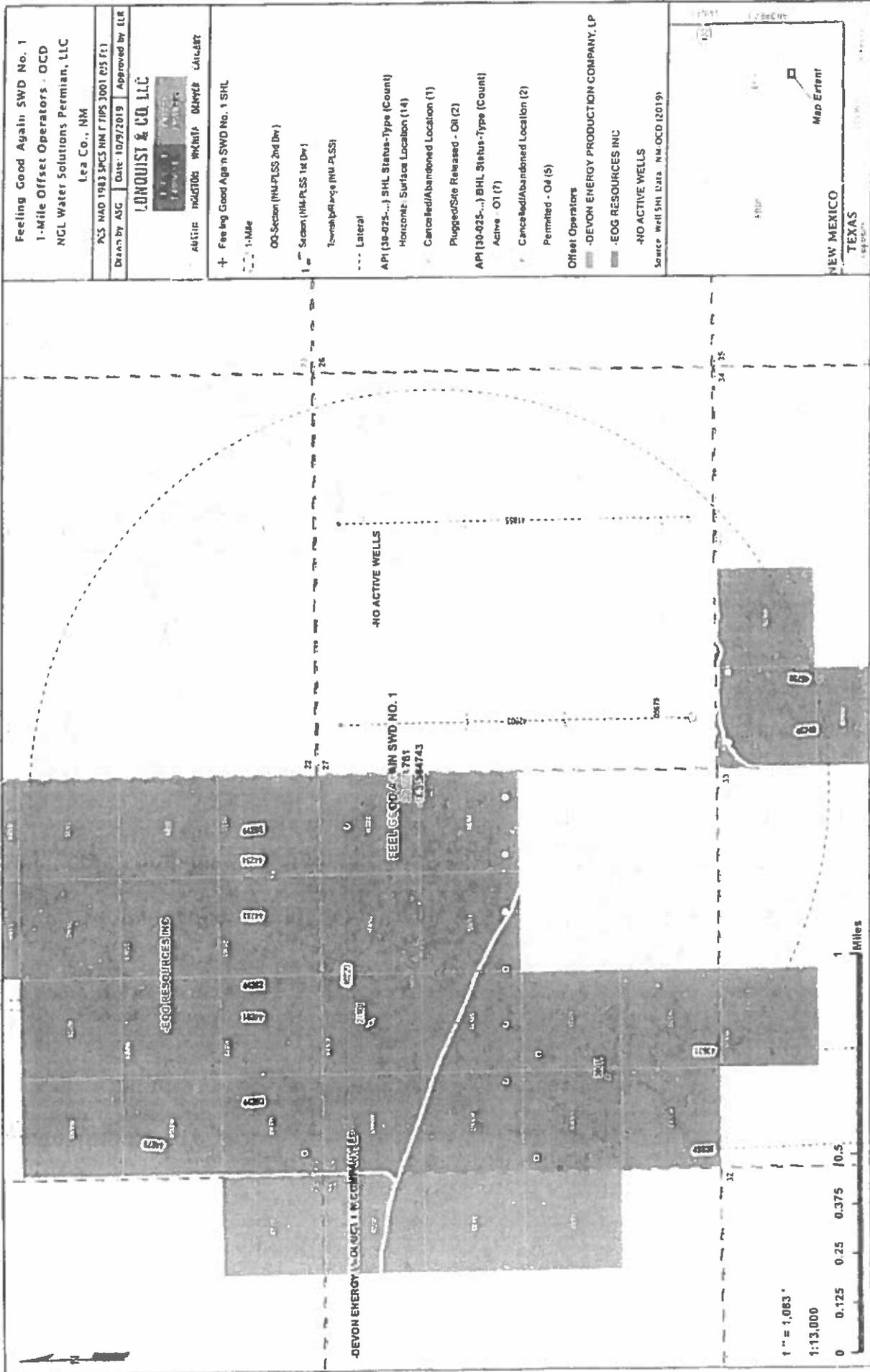
11 L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

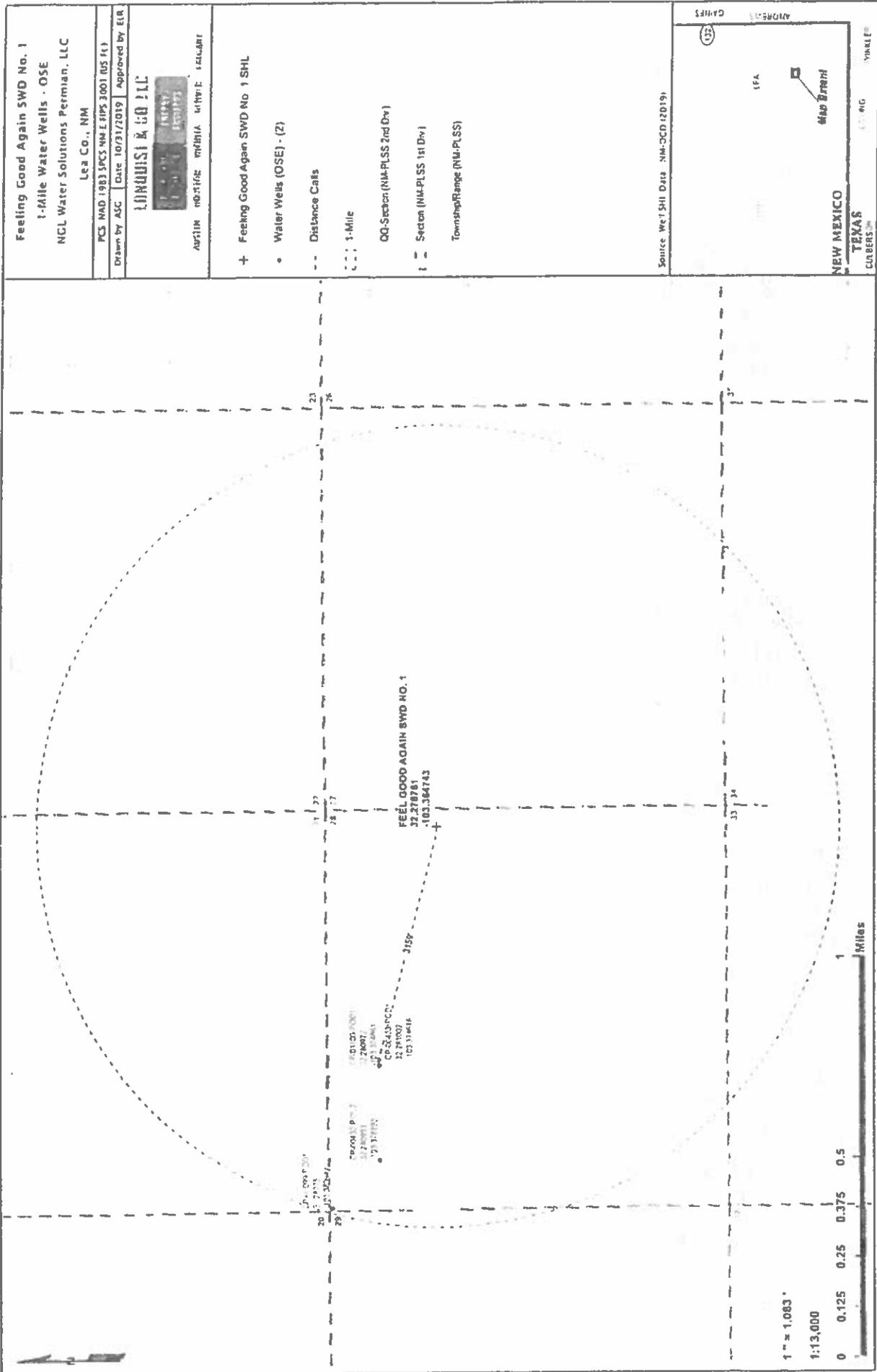
12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

X=840889.91
Y=467994.41







has 20 days after the completion of any newly-drilled or run on the well and a summary of all special tests conducted on directionally drilled wells, true vertical depths shall zone. The form is to be filled in quintuplicate except on

BASS BROTHERS ENTERPRISES, INC. ET AL

North Custer Mountain Unit #1

FORMATION MARKERS:

T/Rustler:	1555	(/1851)
T/Salt:	1695	(/1711)
Base Salt:	3705	(- 299)
T/Yates:	3947	(- 541)
T/Reef:	4397	(- 991)
T/Delaware Sand:	5635	(-2229)
T/Bone Spring:	8997	(-5591)
T/Wolfcamp:	11585	(-8179)
T/Strawn:	12502	(-9096)
T/Atoka:	12725	(-9319)
T/Barnett:	14159	(-10753)
T/Miss. Lime:	15710	(-12304)
T/Woodford:	15570	(-12164)
T/Devonian:	15846	(-12440)

PHICAL SECTION OF STATE

Northwestern New Mexico

_____	T. Penn. "B"	_____
and _____	T. Penn. "C"	_____
_____	T. Penn. "D"	_____
_____	T. Leadville	_____
_____	T. Madison	_____
_____	T. Elbert	_____
_____	T. McCracken	_____
_____	T. Ignacio Quiz	_____
_____	T. Granite	_____
_____	T.	_____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	445	445	Sand, Gravel & Red Bed	-			
445	900	455	Sand & Shale				
900	1286	386	Anhydrite				
1286	1457	171	Red Bed & Anhydrite				
1457	1947	490	Anhydrite & Sand				
1947	3546	1599	Anhydrite & Salt				
3546	3928	382	Lime & Anhydrite				
3928	4117	189	Lime				
4117	4462	345	Dolomite & Sand				
4462	5955	1493	Drilled without returns.				
5955	7584	1629	Lime & Sand				
7584	8048	464	Lime, Sand & Shale				
8048	8435	387	Sand & Shale				
8435	9621	1186	Lime & Sand				
9621	16000	6379	Lime, Shale & Chert				



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

February 27, 2020

TYLER MOEHLMAN

Lonquist Field Services, LLC

12912 HILL COUNTRY BLVD., SUITE F-200

Austin, TX 78738

RE: FEELING GOOD AGAIN SWD # 1

Enclosed are the results of analyses for samples received by the laboratory on 02/13/20 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

- Method EPA 552.2 Total Haloacetic Acids (HAA-5)
- Method EPA 524.2 Total Trihalomethanes (TTHM)
- Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

- Method SM 9223-B Total Coliform and E. coli (Colilert MMO-MUG)
- Method EPA 524.2 Regulated VOCs and Total Trihalomethanes (TTHM)
- Method EPA 552.2 Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Lonquist Field Services, LLC 12912 HILL COUNTRY BLVD., SUITE F-200 Austin TX, 78738	Project: FEELING GOOD AGAIN SWD #1 Project Number: 32.280972-103.374861 Project Manager: TYLER MOEHLMAN Fax To: (512) 732-9816	Reported: 27-Feb-20 12:45
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**FEELING GOOD AGAIN - CP-01100 POD 1
H000451-01 (Water)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Alkalinity, Bicarbonate	332		5.00	mg/L	1	0020601	AC	14-Feb-20	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	0020601	AC	14-Feb-20	310.1	
Chloride*	232		4.00	mg/L	1	0020512	GM	14-Feb-20	4500-C1-B	
Conductivity*	2410		1.00	uS/cm	1	0021402	GM	14-Feb-20	120.1	
pH*	7.47		0.100	pH Units	1	0021402	GM	14-Feb-20	150.1	
Resistivity	4.14			Ohms/m	1	0021402	GM	14-Feb-20	120.1	
Specific Gravity @: 60° F	1.007		0.000	[blank]	1	0021407	AC	14-Feb-20	SM 2710F	
Sulfate*	634		125	mg/L	12.5	0021701	AC	17-Feb-20	375.4	
S*	1580		5.00	mg/L	1	0021410	GM	17-Feb-20	160.1	
Alkalinity, Total*	272		4.00	mg/L	1	0020601	AC	14-Feb-20	310.1	
Sulfide, total	<0.0100		0.0100	mg/l.	1	0021408	AC	14-Feb-20	376.2	

Green Analytical Laboratories

Total Recoverable Metals by ICP (E200.7)

Barium*	<0.250		0.250	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	
Calcium*	90.6		0.500	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	
Iron*	<0.250		0.250	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	
Magnesium*	61.2		0.500	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	
Potassium*	8.59		5.00	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	
Sodium*	358		5.00	mg/L	5	B200238	AES	24-Feb-20	EPA200.7	

Cardinal Laboratories

® Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence in any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether the claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Lonquist Field Services, LLC 12912 HILL COUNTRY BLVD., SUITE F-200 Austin TX, 78738	Project: FEELING GOOD AGAIN SWD #1 Project Number: 32.280972-103.374861 Project Manager: TYLER MOEHLMAN Fax To: (512) 732-9816	Reported: 27-Feb-20 12:45
---	---	------------------------------

**Inorganic Compounds - Quality Control
Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0021402 - General Prep - Wet Chem										
<u>Duplicate (0021402-DUP1)</u>		Source: H000435-01			Prepared & Analyzed: 14-Feb-20					
Conductivity	904	1.00	uS/cm		895			1.00	20	
pH	7.37	0.100	pH Units		7.32			0.681	20	
Resistivity	11.1		Ohms/m		11.2			1.00	20	
Batch 0021407 - General Prep - Wet Chem										
<u>Duplicate (0021407-DUP1)</u>		Source: H000435-01			Prepared & Analyzed: 14-Feb-20					
Specific Gravity @ 60° F	0.9990	0.000	[blank]		0.9993			0.0310	20	
Batch 0021408 - General Prep - Wet Chem										
<u>nk (0021408-BL.K1)</u>					Prepared & Analyzed: 14-Feb-20					
Sulfide, total	ND	0.0100	mg/L							
<u>Duplicate (0021408-DUP1)</u>		Source: H000435-01			Prepared & Analyzed: 14-Feb-20					
Sulfide, total	ND	0.0100	mg/L		ND				20	
Batch 0021410 - Filtration										
<u>Blank (0021410-BLK1)</u>					Prepared: 14-Feb-20 Analyzed: 17-Feb-20					
TDS	ND	5.00	mg/L							
<u>LCS (0021410-BS1)</u>					Prepared: 14-Feb-20 Analyzed: 17-Feb-20					
TDS	533		mg/L	500	107	80-120				

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and their's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence in any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services rendered by Cardinal, regardless of whether the claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Lonquist Field Services, LLC 12912 HILL COUNTRY BLVD., SUITE F-200 Austin TX, 78738	Project: FEELING GOOD AGAIN SWD #1 Project Number: 32.280972-103.374861 Project Manager: TYLER MOEHLMAN Fax To: (512) 732-9816	Reported: 27-Feb-20 12:45
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**Total Recoverable Metals by ICP (E200.7) - Quality Control
Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B200238 - Total Rec. 200.7/200.8/200.2										
Blank (B200238-BLK1)										
Prepared & Analyzed: 24-Feb-20										
Iron	ND	0.050	mg/L							
Sodium	ND	1.00	mg/L							
Barium	ND	0.050	mg/L							
Potassium	ND	1.00	mg/L							
Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
LCS (B200238-BS1)										
Prepared & Analyzed: 24-Feb-20										
Potassium	7.90	1.00	mg/L	8.00		98.8	85-115			
Magnesium	19.3	0.100	mg/L	20.0		96.6	85-115			
	3.88	0.050	mg/L	4.00		97.1	85-115			
Calcium	3.87	0.100	mg/L	4.00		96.8	85-115			
Sodium	3.20	1.00	mg/L	3.24		98.8	85-115			
Barium	1.93	0.050	mg/L	2.00		96.3	85-115			
LCS Dup (B200238-BSD1)										
Prepared & Analyzed: 24-Feb-20										
Magnesium	19.4	0.100	mg/L	20.0		96.8	85-115	0.158	20	
Barium	1.94	0.050	mg/L	2.00		96.9	85-115	0.668	20	
Iron	3.87	0.050	mg/L	4.00		96.8	85-115	0.290	20	
Potassium	7.90	1.00	mg/L	8.00		98.7	85-115	0.0166	20	
Calcium	3.90	0.100	mg/L	4.00		97.4	85-115	0.673	20	
Sodium	3.19	1.00	mg/L	3.24		98.5	85-115	0.262	20	

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*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Longist Project Manager: Tyler Moenlman Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner Project Name: Feeling Good Again Swt# 1 Project Location: 32.28972 - 105.57461 Sampler Name:		BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #: PRESERV: ICE / COOL ACID/BASE: OTHER: SLUDGE OIL SOIL WASTEWATER GROUNDWATER # CONTAINERS (GRAB OR (COMP)		ANALYSIS REQUEST DATE TIME 2/13/20 10:50 Scale Scale	
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FOR LAB USE ONLY

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Relinquished By: 2/13/20 Gladie Peterson Received By: 2/13/20 Gladie Peterson
 Date: 2/13/20 Time: 13:00
 Relinquished By: _____ Received By: _____
 Date: _____ Time: _____

Delivered By: (Circle One) Observed Temp. °C 4.7 Sample Condition Cool Intact Unstable
 Sampler - UPS - Bus - Other: _____ Corrected Temp. °C _____

Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: _____

REMARKS: _____

Turnaround Time: Standard Rush Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
 Thermometer ID #97 Yes No
 Correction Factor +0.4 °C Yes No Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email - changes to celey.keene@cardinallabsnm.com