DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
Y/14/2016		PRG	Y/14/2016	SWD	pMAM1601454134

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

-SWD 1620
-Chevron USA, Inc
4323

well
-Gravitas 2 SWD #2
30-015-pending
Pool
-SWD; Devonian-Silurian
97869

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☒ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Cindy Herrera-Murillo	Cindy Herrera-Murillo	Permitting Specialist	01/12/2016
Print or Type Name	Signature	Title	Date

Cherreramurillo@chevro.com
e-mail Address

Cindy Herrera-Murillo
Regulatory Specialist
Midcontinent BU

Chevron North America
Exploration and Production Company
(A Chevron U.S.A. Inc. Division)
1616 W. Bender Blvd
Hobbs FMT, Hobbs, NM 88240
Tel 575-263-0431
Cherreramurillo@chevron.com

January 12, 2016

State of New Mexico Land Office
Attn: Pete Martinez
P O Box 1148
Santa Fe, New Mexico 87504

Re: Application for Authorization
To Inject as SWD- OCD form C108
Gravitas 2 State SWD #2
Eddy County, New Mexico

Dear Sirs,

Chevron U.S.A. Inc. respectfully requests administrative approval to inject salt water into the Gravitas 2 State SWD #2. (API # Pending), which is located at 400' FSL & 1560" FWL , Unit Letter N, Section 2, T26S-R27E, Eddy County, New Mexico.

The injection intervals will be in the Devonian Silurian formation from 13,900' – 15,100', through perforations, with maximum anticipated injection rate to 37000 BWPD, and a maximum injection pressure to be confirmed and approved by a step rate test. There will be no CO2 or produced gas injected. There is also no production from this interval in the immediate area.

Attached is an OCD form C-108 with information relative to the SWD injection of the referenced well. A copy of the letter sent to applicable surface land owners and offset operators is included in the attachment. Chevron USA Inc owns 100% working interest as to SW Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico.

Your prompt consideration and approval of this application will be greatly appreciated. If additional information is required, you may contact me at 575-263-0431, or by email at Cherreramurillo@chevron.com.

Sincerely,

Cindy Herrera-Murillo

Cindy Herrera-Murillo
Regulatory Specialist
Enclosure

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 ___XX___Disposal _____Storage
Application qualifies for administrative approval? ___XX_____Yes _____No

II. OPERATOR: CHEVRON USA INC.

ADDRESS: 1616 W. BENDER BLVD. HOBBS, NM 88240

CONTACT PARTY: CINDY HERRERA-MURILLO HONE: 575-263-0431

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 ___XX_____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. See Attached

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. No wells currently exist within the area of review

VII. Attach data on the proposed operation, including: See Attached
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. This well will dispose into the Silurian aged, highly fractured/karsted, Upper Silurian and Fusselman formations that are predominately composed of mixed lime/dolostone carbonates over a 1,200' gross open hole injection interval from 13,900' – 15,100' TVD. Base of potential fresh water for the area occurs at the Rustler –Castille boundary, 350'-400' TVD, putting the top of our open hole injection interval 13,500' below boundary.

IX. Describe the proposed stimulation program, if any. See Attached

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). No current logs or test date exist due to this being a new drill. GR, resistivity, density, neutron, and sonic logs will be run across all major zones of interest. A mudlog will be obtained past the Lamar formation to TD.

*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: CINDY HERRERA-MURILLO TITLE: REGULATORY SPECIALIST

SIGNATURE: Cindy Herrera-Murillo DATE: 01/12/2016

E-MAIL ADDRESS: CHERRERAMURILLO@CHEVRON.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

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
VB 1805-2 Gravitas 2 State SWD #2 400 ' FSL & 1560' FWD Section 2, T26S-R27E

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined. See Attached

(3) A description of the tubing to be used including its size, lining material, and setting depth. See Attached

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used. See attached

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name. Upper Silurian and Fusselman formation

(2) The injection interval and whether it is perforated or open-hole. Injection Intervals 13,900 – 15,100 TVD Open hole

(3) State if the well was drilled for injection or, if not, the original purpose of the well. Injection well

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any. Wolfcamp 10,000 TVD ; No zone lower

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. 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
1220 S. St. 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	3 Pool Name
-		SWD; Devonian

4 Property Code	5 Property Name	6 Well Number
	GRAVITAS 2 STATE SWD	2

7 OGRID No.	8 Operator Name	9 Elevation
4323	CHEVRON U.S.A., INC.	3211'

10 Surface Location

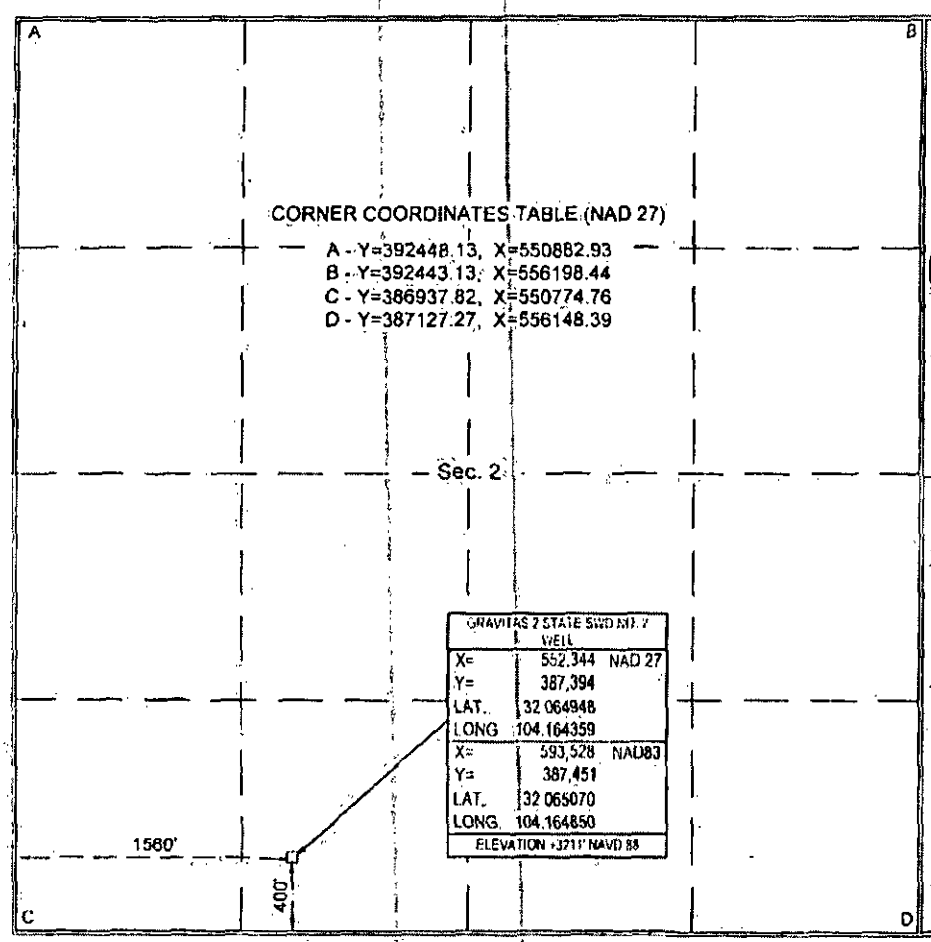
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	26 SOUTH	27 EAST, N.M.P.M.		400'	SOUTH	1560'	WEST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	26 SOUTH	27 EAST, N.M.P.M.		400'	SOUTH	1560'	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
40			

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.



16 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cindy Herrera-Murillo 02/01/2016
Signature Date

Cindy Herrera-Murillo
Printed Name

Cindy.Herrera-Murillo
E-mail Address

17 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

12-07-2015
Date of Survey

Signature and Seal of Professional Surveyor

NEW MEXICO 23006 PROFESSIONAL SURVEYOR

23006
Certificate Number

Side 1

INJECTION WELL DATA SHEET

OPERATOR: CHEVRON USA INC.

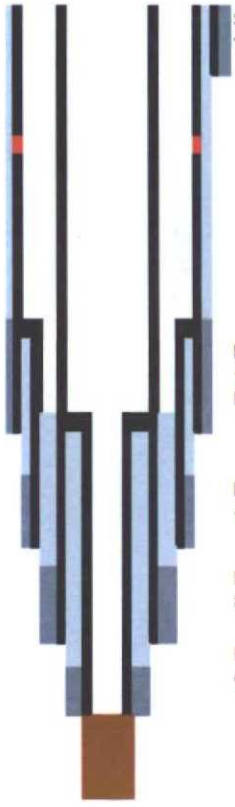
WELL NAME & NUMBER: Gravitas 2 State SWD #2

WELL LOCATION: 400' FSL & 1560' FWL; N Section 2, T26S- R 27E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

Eddy County Horizontal Development Hayhurst NM
Drilling Program "Quick-Look" for 5 String + OH



Surface String
18-5/8" 87.5 ppf, H-40,BTC @ 450'

Intermediate String
13-3/8" 72 ppf, P-110S, BLUE @ Second Bone Spring (Collar size=14.252")
DV Tool @ Lamar

Intermediate Liner String
10-3/4" 55 ppf, p-110, BTC @ WC-B (Collar size=11.75")

Production String
8-5/8" 44 ppf, TN110HC, T-521 @ Base of Barnett Shale (Collar size=9.134")

Production Liner String
6-5/8", 32 ppf, P-110-IC, T-521 @ Fusselman (Collar size=7.120)

WELL CONSTRUCTION DATA

Slurry	Type	Top	Bottom	Weight (ppg)	Yield (sx/cu ft)	Sacks	Water gal/sk
Surface							
Tail	Class C	0'	450'	14.8	1.33	422	6.37
Intermediate							
Stage 2 Lead	50:50 Poz: Class C + Antifoam, Extender, Salt, Retarder	0'	1,100'	11.9	2.43	194	14.21
Stage 2 Tail	Class C + Antifoam, Retarder, Viscosifier	1,100'	2,100'	14.8	1.33	321	6.37
Stage 1 Lead	50:50 Poz: Class H + Extender, Antifoam, Retarder, Salt, Viscosifier	2,100'	6,600'	11.9	2.43	792	13.76
Stage 1 Tail	Class H + Retarder, Extender, Dispersant	6,600'	7,600'	15.6	1.21	353	5.54
Intermediate Liner							
Lead	50:50 Poz: Class H + Extender, Antifoam, Dispersant, , Retarder	7,300'	8,200'	14.5	1.21	140	5.54
Tail	Class H + Viscosifier, Antifoam, Dispersant, Fluid Loss, Retarder, Expanding Agent	8,200'	9,200'	15.6	1.2	157	5.30
Production							
Lead	50:50 Poz: Class H + Extender, Antifoam, Dispersant, , Retarder	8,900'	11,810'	14.5	1.21	208	5.54
Tail	Class H + Viscosifier, Antifoam, Dispersant, Fluid Loss, Retarder, Expanding Agent	11,810'	12,810'	15.6	1.2	72	5.30
Production Liner							
Tail	Class H	12,500'	14,000'	11.7	2.45	56	14.21

Injection Interval

13,900 feet To 15,100 TVD (Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5-1/2'' x 4-1/2'' Lining Material: Fiberglass

Type of Packer: Model DA Retainer Production Packer Corrosion Resistant Alloy with Anchor Latch

Packer Setting Depth: 13,800' to 13,900'

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

Additional Data

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

   If no, for what purpose was the well originally drilled? _____

   _____

2. Name of the Injection Formation: Devonian Silurian

3. Name of Field or Pool (if applicable): _____

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. N/A New Drill

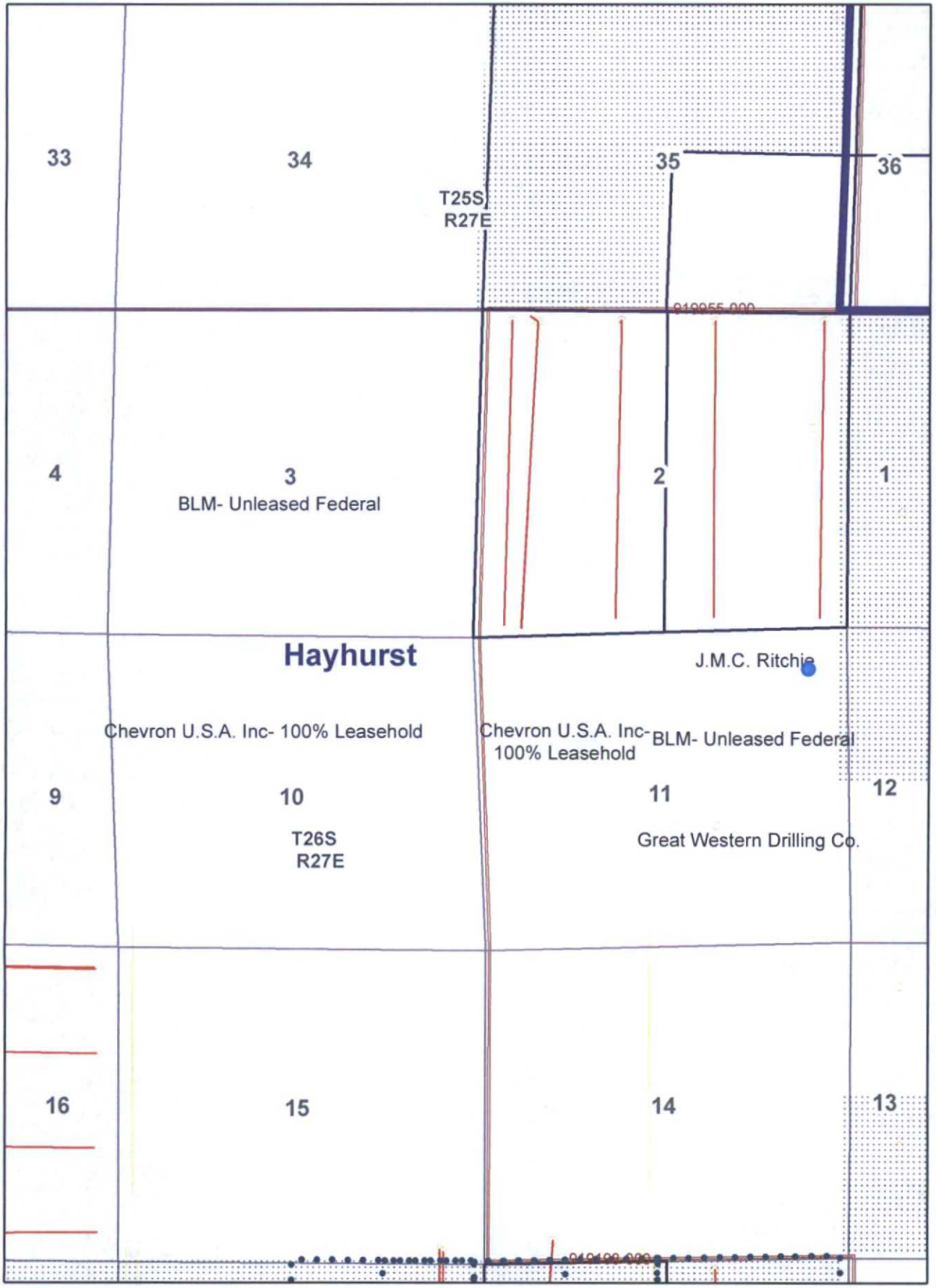
   _____

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Wolfcamp (10,000 TVD); _____

   _____

   _____

   _____


33
34
T25S
R27E
35
36
4
3
BLM- Unleased Federal
2
1
Hayhurst
J.M.C. Ritchie
Chevron U.S.A. Inc- 100% Leasehold
Chevron U.S.A. Inc-
100% Leasehold
BLM- Unleased Federal
9
10
11
12
T26S
R27E
Great Western Drilling Co.
16
15
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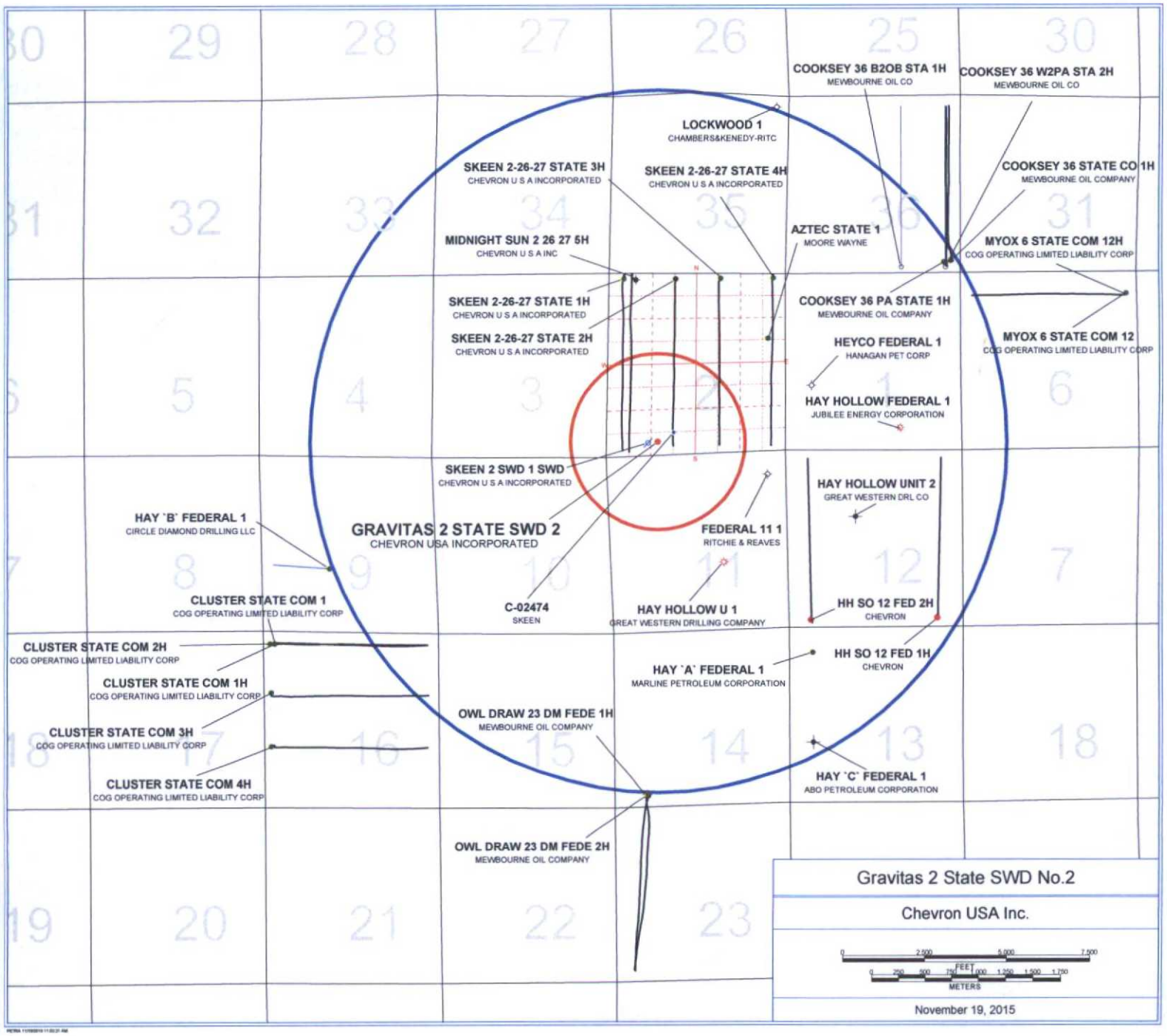

COOKSEY 36 B2OB STA 1H
MEWBOURNE OIL CO
COOKSEY 36 W2PA STA 2H
MEWBOURNE OIL CO
LOCKWOOD 1
CHAMBERS&KENEDY-RITC
SKEEN 2-26-27 STATE 3H
CHEVRON U S A INCORPORATED
SKEEN 2-26-27 STATE 4H
CHEVRON U S A INCORPORATED
COOKSEY 36 STATE CO 1H
MEWBOURNE OIL COMPANY
AZTEC STATE 1
MOORE WAYNE
MIDNIGHT SUN 2 26 27 5H
CHEVRON U S A INC
MYOX 6 STATE COM 12H
COG OPERATING LIMITED LIABILITY CORP
SKEEN 2-26-27 STATE 1H
CHEVRON U S A INCORPORATED
SKEEN 2-26-27 STATE 2H
CHEVRON U S A INCORPORATED
COOKSEY 36 PA STATE 1H
MEWBOURNE OIL COMPANY
HEYCO FEDERAL 1
HANAGAN PET CORP
MYOX 6 STATE COM 12
COG OPERATING LIMITED LIABILITY CORP
HAY HOLLOW FEDERAL 1
JUBILEE ENERGY CORPORATION
SKEEN 2 SWD 1 SWD
CHEVRON U S A INCORPORATED
HAY HOLLOW UNIT 2
GREAT WESTERN DRL CO
HAY `B` FEDERAL 1
CIRCLE DIAMOND DRILLING LLC
GRAVITAS 2 STATE SWD 2
CHEVRON USA INCORPORATED
FEDERAL 11 1
RITCHIE & REAVES
CLUSTER STATE COM 1
COG OPERATING LIMITED LIABILITY CORP
C-02474
SKEEN
HAY HOLLOW U 1
GREAT WESTERN DRILLING COMPANY
HH SO 12 FED 2H
CHEVRON
CLUSTER STATE COM 2H
COG OPERATING LIMITED LIABILITY CORP
HAY `A` FEDERAL 1
MARLINE PETROLEUM CORPORATION
HH SO 12 FED 1H
CHEVRON
CLUSTER STATE COM 1H
COG OPERATING LIMITED LIABILITY CORP
OWL DRAW 23 DM FEDE 1H
MEWBOURNE OIL COMPANY
CLUSTER STATE COM 3H
COG OPERATING LIMITED LIABILITY CORP
HAY `C` FEDERAL 1
ABO PETROLEUM CORPORATION
CLUSTER STATE COM 4H
COG OPERATING LIMITED LIABILITY CORP
OWL DRAW 23 DM FEDE 2H
MEWBOURNE OIL COMPANY
Gravitas 2 State SWD No.2
Chevron USA Inc.
0 2,500 5,000 7,500
FEET
0 250 500 750 1,000 1,250 1,500 1,750
METERS
November 19, 2015

HH NM SWD #1

First 12 months- average BWPD injection rate

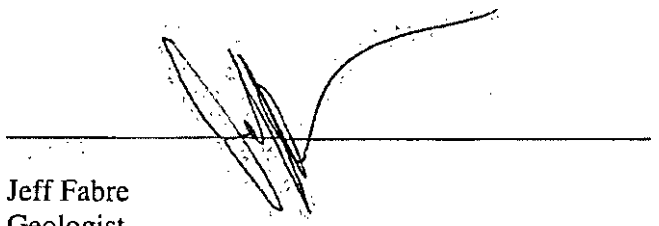
Date	BWPD
Jan-18	15687
Feb-18	17152
Mar-18	14417
Apr-18	12264
May-18	10780
Jun-18	9684
Jul-18	8837
Aug-18	8142
Sep-18	7586
Oct-18	22798
Nov-18	23860
Dec-18	20776

Average daily rate for the first 12 months is
14332 BWPD

Peak is at 37,000 BWPD

Stages	Rate (bpm)	Clean Fluid (gal)	Proppant Conc (lb/gal)	Proppant Conc (lb/gal)	Proppant (lb)	Dirty Fluid (gal)	Job Time (min)	Type Fluid	Proppant	19N (gal)	HAI 404M (gal)	HII 124F (gal)	WG-17 (lb)	TLC-80 (lbs)	SGA HT M (gal)	XL-1 (gal)	BF-1 (gal)	Perchek Inhibitor (lb)
Load Well	5	1,000				1,000	4.8	Fresh Water										
Acid	5	5,000				5,000	23.8	15% HCL		5.0	100.0	100.0						
ZCA Acid	5	5,000				5,000	23.8	ZCA Acid		5.0	100.0	100.0			50	22.5	10	20
Acid	5	10,000				10,000	47.6	15% Acid		10.0	200.0	200.0						
Spacer	5	5,000				5,000	23.8	Fresh Water		5.0								
Diverter	5	100				100	0.5	10# Gel					1.0	50.0				
Spacer	5	2,000				2,000	9.5	Fresh Water		2.0								
Acid	5	5,000				5,000	23.8	15% HCL		5.0	100.0	100.0						
ZCA Acid	5	5,000				5,000	23.8	ZCA Acid		5.0	100.0	100.0			50	22.5	10	20
Acid	5	10,000				10,000	47.6	15% Acid		10.0	200.0	200.0						
Spacer	5	5,000				5,000	23.8	Fresh Water		5.0								
Diverter	5	100				100	0.5	10# Gel					1.0	50.0				
Spacer	5	2,000				2,000	9.5	Fresh Water		2.0								
Acid	5	5,000				5,000	23.8	15% HCL		5.0	100.0	100.0						
ZCA Acid	5	5,000				5,000	23.8	ZCA Acid		5.0	100.0	100.0			50	22.5	10	20
Acid	5	10,000				10,000	47.6	15% Acid		10.0	200.0	200.0						
Spacer	5	5,000				5,000	23.8	Fresh Water		5.0								
Diverter	5	100				100	0.5	10# Gel					1.0	50.0				
Spacer	5	2,000				2,000	9.5	Fresh Water		2.0								
Acid	5	5,000				5,000	23.8	15% HCL		5.0	100.0	100.0						
ZCA Acid	5	5,000				5,000	23.8	ZCA Acid		5.0	100.0	100.0			50	22.5	10	20
Acid	5	10,000				10,000	47.6	15% Acid		10.0	200.0	200.0						
Spacer	5	5,000				5,000	23.8	Fresh Water		5.0								
Diverter	5	100				100	0.5	10# Gel					1.0	50.0				
Spacer	5	2,000				2,000	9.5	Fresh Water		2.0								
Acid	5	5,000				5,000	23.8	15% HCL		5.0	100.0	100.0						
ZCA Acid	5	5,000				5,000	23.8	ZCA Acid		5.0	100.0	100.0			50	22.5	10	20
Acid	5	10,000				10,000	47.6	15% Acid		10.0	200.0	200.0						
Flush	5	13,000				13,000	61.9	Fresh Water		13.0								
Fresh Water		**42,000**																
10# Gel		**400**																
15% HCL Acid		**75,000**																
ZCA Acid		**25,000**			**0**													
					0													
					0													
TOTAL		**142,400**			**0**	**27,200**	**678**			**141**	**2000**	**2000**	**4**	**200**	**250**	**113**	**50**	**100**
Total Stages									Total Chemicals	141.0	2000.0	2000.0	4.0	200.0	250.0	112.5	50.0	100.0
1																		

I have examined the available data for this disposal well (Gravitas 2 State SWD 2) and find no evidence of open faults or other hydrologic connections between the disposal zone in this well and any underground sources of drinking water.



Jeff Fabre
Geologist
Chevron USA Inc.

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02474 **Subbasin:** CUB **Subfile:** -
Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0
Total Diversion: 3
Owner: MARTHA SKEEN

Documents on File

Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images 198101	DCL	1995-12-12	DCL	PRC	C-02474	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02474			4	3	02	26S	27E	578964	3548029*	

*An (*) after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1913	DCL	0	3	C 02474	

Place of Use

Q 256	Q 64	Q 16	Q 4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
							0	3		PLS	12/31/1913	DCL	NO PLACE OF USE GIVEN

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(Quarters are 1=NW 2=NE 3=SW 4=SE)
(Quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	County	Q64	Q16	Q4	Sec	Twns	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02474	CUB	ED	4	3		02	26S	27E	578964	3548029*	142	100		

Average Depth to Water: –

Minimum Depth: –

Maximum Depth: –

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 578863 Northing (Y): 3547928 Radius: 1650

BAKER HUGHES

Permian Basin Area Laboratory
2101 Market Street,
Midland, Texas 79703

Upstream Chemicals

REPORT DATE: 11/19/2015

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER:	CHEVRON	**ACCOUNT REP:**	HECTOR M ESPINOZA
DISTRICT:	NEW MEXICO	**SAMPLE ID:**	201401025581
AREA/LEASE:	SKEEN	**SAMPLE DATE:**	10/31/2014
SAMPLE POINT NAME	SKEEN 1H	**ANALYSIS DATE:**	11/21/2014
SITE TYPE:	WELL SITES	**ANALYST:**	SAMUEL NEWMAN
SAMPLE POINT DESCRIPTION:	NOT PROVIDED		

CHEVRON, SKEEN, SKEEN 1H

FIELD DATA	
Initial Temperature (°F):	250
Final Temperature (°F):	80
Initial Pressure (psi):	100
Final Pressure (psi):	15
pH:	
pH at time of sampling:	7.0

ALKALINITY BY TITRATION:	mg/L	meq/L
Bicarbonate (HCO_3^-):	366.0	6.0
Carbonate (CO_3^{2-}):	ND	
Hydroxide (OH^-):	ND	

aqueous CO_2 (ppm):	300.0
aqueous H_2S (ppm):	ND
aqueous O2 (ppb):	ND
Calculated TDS (mg/L):	112928
Density/Specific Gravity (g/cm³):	1.0713
Measured Specific Gravity	1.0826
Conductivity (mmhos):	ND
Resistivity:	ND
MCF/D:	No Data
BOPD:	No Data
BWPD:	No Data

ANALYSIS OF SAMPLE — ANIONS:	mg/L	meq/L
Chloride (Cl^-):	71856.7	2027.0
Sulfate (SO_4^{2-}):	746.7	15.5
Borate (H_3BO_3):	228.9	3.7
Fluoride (F^-):	ND	
Bromide (Br^-):	ND	
Nitrite (NO_2^-):	ND	
Nitrate (NO_3^-):	ND	
Phosphate (PO_4^{3-}):	ND	
Silica (SiO_2):	ND	

ORGANIC ACIDS:	mg/L	meq/L
Formic Acid:	ND	
Acetic Acid:	ND	
Propionic Acid:	ND	
Butyric Acid:	ND	
Valeric Acid:	ND	

CATIONS:	mg/L	meq/L
Sodium (Na^+):	32380.3	1409.1
Potassium (K^+):	581.9	14.9
Magnesium (Mg^{2+}):	781.0	64.3
Calcium (Ca^{2+}):	5190.7	259.0
Strontium (Sr^{2+}):	741.8	16.9
Barium (Ba^{2+}):	0.0	0.0
Iron (Fe^{2+}):	52.5	1.9
Manganese (Mn^{2+}):	1.6	0.1
Lead (Pb^{2+}):	ND	
Zinc (Zn^{2+}):	0.0	0.0
Aluminum (Al^{3+}):	ND	
Chromium (Cr^{3+}):	ND	
Cobalt (Co^{2+}):	ND	
Copper (Cu^{2+}):	ND	
Molybdenum (Mo^{2+}):	ND	
Nickel (Ni^{2+}):	ND	
Tin (Sn^{2+}):	ND	
Titanium (Ti^{2+}):	ND	
Vanadium (V^{2+}):	ND	
Zirconium (Zr^{2+}):	ND	
Total Hardness:	17040	N/A

Anion/Cation Ratio: 1.16

ND = Not Determined

SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Conditions		Barite ($BaSO_4$)		Calcite ($CaCO_3$)		Gypsum ($CaSO_4 \cdot 2H_2O$)		Anhydrite ($CaSO_4$)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
80°F	15 psi		0.000	1.49	78.424	-0.38	0.000	-0.57	0.000
99°F	24 psi		0.000	1.54	80.082	-0.37	0.000	-0.48	0.000
118°F	34 psi		0.000	1.62	82.315	-0.36	0.000	-0.38	0.000
137°F	43 psi		0.000	1.71	84.557	-0.35	0.000	-0.28	0.000
156°F	53 psi		0.000	1.79	86.654	-0.33	0.000	-0.18	0.000
174°F	62 psi		0.000	1.88	88.566	-0.32	0.000	-0.07	0.000
193°F	72 psi		0.000	1.96	90.293	-0.31	0.000	0.04	32.713
212°F	81 psi		0.000	2.05	91.949	-0.30	0.000	0.16	107.992
231°F	91 psi		0.000	2.14	93.476	-0.28	0.000	0.27	167.469
250°F	100 psi		0.000	2.23	94.830	-0.27	0.000	0.39	213.686

Conditions		Celestite ($SrSO_4$)		Halite (NaCl)		Iron Sulfide (FeS)		Iron Carbonate ($FeCO_3$)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
80°F	15 psi	0.50	229.339	-1.43	0.000	-7.83	0.000	1.15	31.665
99°F	24 psi	0.51	231.277	-1.45	0.000	-7.93	0.000	1.26	32.955
118°F	34 psi	0.52	233.566	-1.46	0.000	-7.98	0.000	1.38	34.123
137°F	43 psi	0.53	236.715	-1.47	0.000	-8.01	0.000	1.49	35.015
156°F	53 psi	0.54	241.029	-1.47	0.000	-8.02	0.000	1.60	35.664
174°F	62 psi	0.56	246.632	-1.48	0.000	-8.02	0.000	1.69	36.132
193°F	72 psi	0.58	253.489	-1.48	0.000	-8.02	0.000	1.76	36.468
212°F	81 psi	0.61	261.441	-1.48	0.000	-7.99	0.000	1.83	36.731
231°F	91 psi	0.64	270.237	-1.48	0.000	-7.96	0.000	1.89	36.927
250°F	100 psi	0.67	279.564	-1.48	0.000	-7.93	0.000	1.93	37.066

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

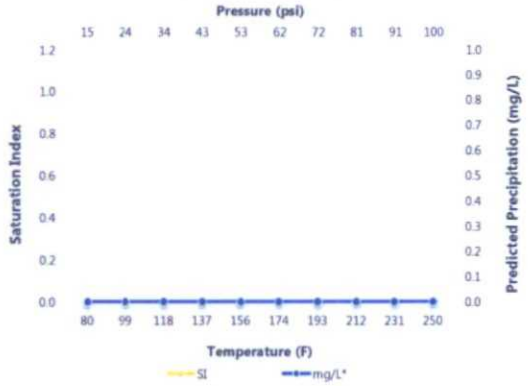
Note 3: Saturation Index predictions on this sheet use pH and alkalinity; $\%CO_2$ is not included in the calculations.

EESI
ScaleSoftPitzer™
SSP2010

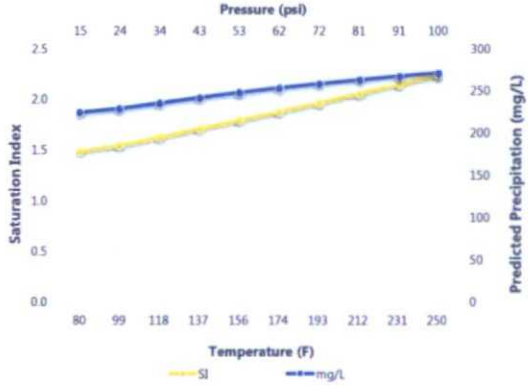
Comments:

SAMPLE ID: 41943 CHEVRON, SKEEN, SKEEN 1H

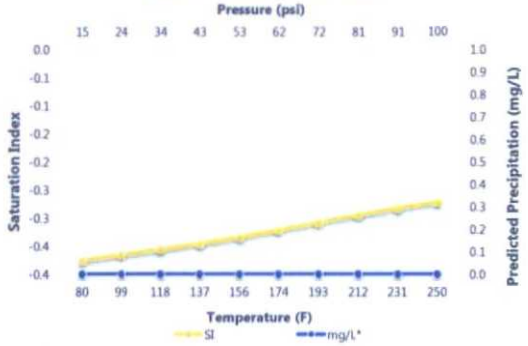
Barite (BaSO4)



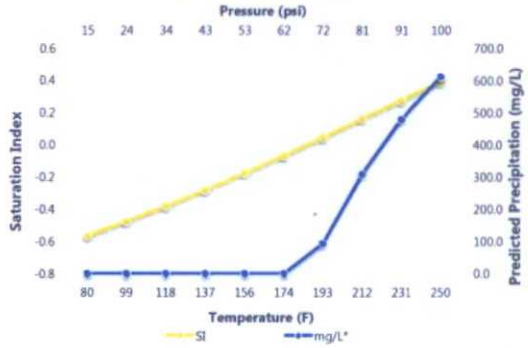
Calcite (CaCO3)



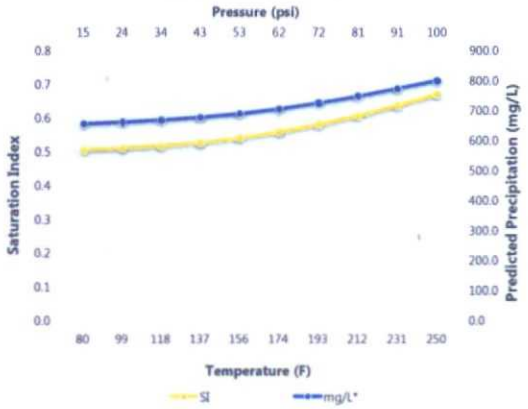
Gypsum (CaSO4·2H2O)



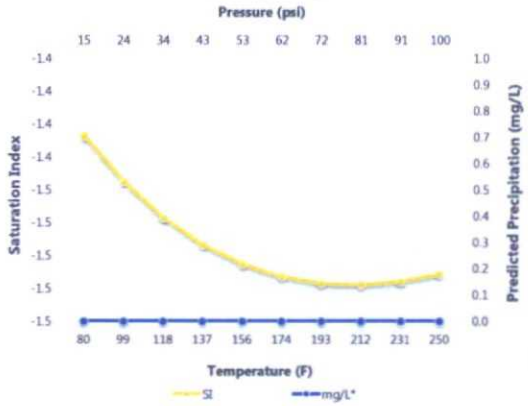
Anhydrite (CaSO4)



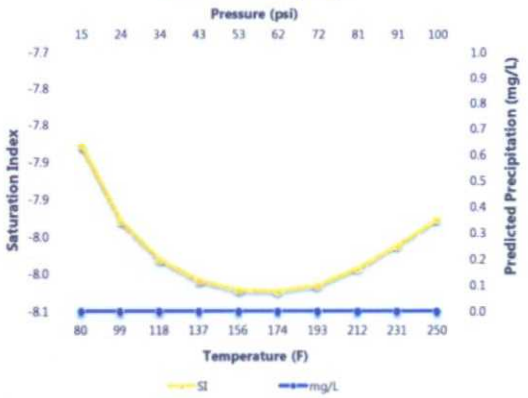
Celestite (SrSO4)



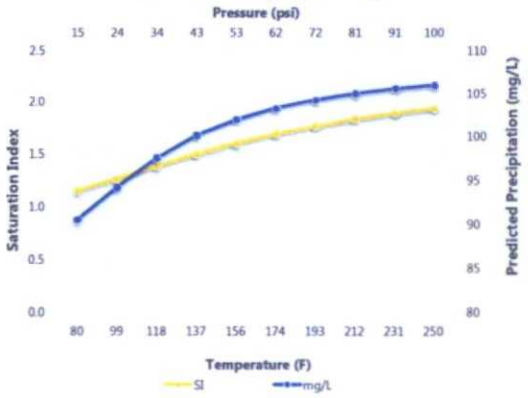
Halite (NaCl)



Iron Sulfide (FeS)



Iron Carbonate (FeCO3)



SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

BAKER HUGHES

Permian Basin Area Laboratory
2101 Market Street,
Midland, Texas 79703

Upstream Chemicals

REPORT DATE: 12/9/2015

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER:	CHEVRON	**ACCOUNT REP:**	BYRON J SMITH
DISTRICT:	STIMPLUS PERMIAN	**SAMPLE ID:**	201401004529
AREA/LEASE:	COTTON HILLS	**SAMPLE DATE:**	3/25/2014
SAMPLE POINT NAME	COTTON HILLS 23-26-27 FED COM 1H	**ANALYSIS DATE:**	4/10/2014
SITE TYPE:		**ANALYST:**	STACEY D SMITH
SAMPLE POINT DESCRIPTION:			

CHEVRON, COTTON HILLS, COTTON HILLS 23-26-27 FED COM 1H

FIELD DATA	
Initial Temperature (°F):	250
Final Temperature (°F):	51
Initial Pressure (psi):	100
Final Pressure (psi):	15
pH:	
pH at time of sampling:	8.3

ALKALINITY BY TITRATION:	mg/L	meq/L
Bicarbonate (HCO_3^-):	171.0	2.8
Carbonate (CO_3^{2-}):	ND	
Hydroxide (OH^-):	ND	

aqueous CO_2 (ppm):	0.0
aqueous H_2S (ppm):	0.0
aqueous O2 (ppb):	ND
Calculated TDS (mg/L):	98319
Density/Specific Gravity (g/cm³):	1.0617
Measured Specific Gravity	1.0720
Conductivity (mmhos):	ND
Resistivity:	ND
MCF/D:	No Data
BOPD:	No Data
BWPD:	No Data

ANALYSIS OF SAMPLE — ANIONS:	mg/L	meq/L
Chloride (Cl^-):	61728.0	1741.3
Sulfate (SO_4^{2-}):	332.0	6.9
Borate (H_3BO_3):	398.2	6.4
Fluoride (F^-):	ND	
Bromide (Br^-):	ND	
Nitrite (NO_2^-):	ND	
Nitrate (NO_3^-):	ND	
Phosphate (PO_4^{3-}):	ND	
Silica (SiO_2):	ND	

ORGANIC ACIDS:	mg/L	meq/L
Formic Acid:	ND	
Acetic Acid:	ND	
Propionic Acid:	ND	
Butyric Acid:	ND	
Valeric Acid:	ND	

CATIONS:	mg/L	meq/L
Sodium (Na^+):	30933.3	1346.1
Potassium (K^+):	534.9	13.7
Magnesium (Mg^{2+}):	445.6	36.7
Calcium (Ca^{2+}):	2896.6	144.5
Strontium (Sr^{2+}):	865.5	19.8
Barium (Ba^{2+}):	4.1	0.1
Iron (Fe^{2+}):	9.4	0.3
Manganese (Mn^{2+}):	0.5	0.0
Lead (Pb^{2+}):	ND	
Zinc (Zn^{2+}):	0.0	0.0
Aluminum (Al^{3+}):	ND	
Chromium (Cr^{3+}):	ND	
Cobalt (Co^{2+}):	ND	
Copper (Cu^{2+}):	ND	
Molybdenum (Mo^{2+}):	ND	
Nickel (Ni^{2+}):	ND	
Tin (Sn^{2+}):	ND	
Titanium (Ti^{2+}):	ND	
Vanadium (V^{2+}):	ND	
Zirconium (Zr^{2+}):	ND	
Total Hardness:	10067	N/A

Anion/Cation Ratio: 1.13

ND = Not Determined

SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Conditions		Barite ($BaSO_4$)		Calcite ($CaCO_3$)		Gypsum ($CaSO_4 \cdot 2H_2O$)		Anhydrite ($CaSO_4$)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
51°F	15 psi	1.05	2.191	1.04	9.767	-0.96	0.000	-1.26	0.000
73°F	24 psi	0.85	2.067	1.09	9.905	-0.94	0.000	-1.16	0.000
95°F	34 psi	0.68	1.905	1.13	9.998	-0.93	0.000	-1.06	0.000
117°F	43 psi	0.54	1.706	1.17	10.080	-0.92	0.000	-0.96	0.000
139°F	53 psi	0.41	1.476	1.21	10.157	-0.91	0.000	-0.84	0.000
162°F	62 psi	0.31	1.226	1.26	10.231	-0.90	0.000	-0.72	0.000
184°F	72 psi	0.22	0.967	1.31	10.303	-0.88	0.000	-0.59	0.000
206°F	81 psi	0.15	0.710	1.36	10.371	-0.87	0.000	-0.46	0.000
228°F	91 psi	0.09	0.461	1.41	10.434	-0.85	0.000	-0.32	0.000
250°F	100 psi	0.04	0.224	1.46	10.491	-0.84	0.000	-0.18	0.000

Conditions		Celestite ($SrSO_4$)		Halite (NaCl)		Iron Sulfide (FeS)		Iron Carbonate ($FeCO_3$)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
51°F	15 psi	0.25	80.611	-1.51	0.000	-6.93	0.000	0.10	0.926
73°F	24 psi	0.26	82.045	-1.53	0.000	-7.18	0.000	0.23	1.959
95°F	34 psi	0.26	83.013	-1.55	0.000	-7.38	0.000	0.34	2.716
117°F	43 psi	0.27	84.416	-1.56	0.000	-7.53	0.000	0.43	3.273
139°F	53 psi	0.28	86.874	-1.57	0.000	-7.65	0.000	0.51	3.685
162°F	62 psi	0.29	90.726	-1.58	0.000	-7.75	0.000	0.57	3.985
184°F	72 psi	0.32	96.049	-1.58	0.000	-7.81	0.000	0.61	4.196
206°F	81 psi	0.35	102.704	-1.58	0.000	-7.86	0.000	0.64	4.333
228°F	91 psi	0.38	110.382	-1.58	0.000	-7.89	0.000	0.66	4.403
250°F	100 psi	0.42	118.679	-1.57	0.000	-7.92	0.000	0.66	4.410

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

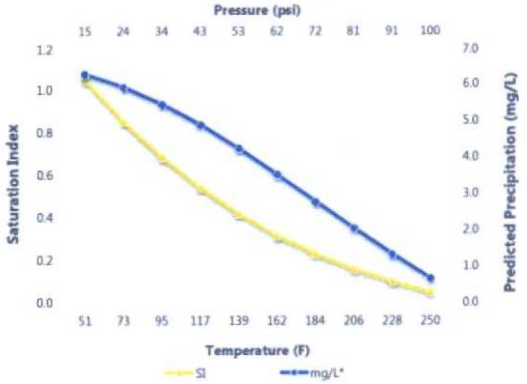
Note 3: Saturation Index predictions on this sheet use pH and alkalinity; $\%CO_2$ is not included in the calculations.

ScaleSoftPitzer™ SSP2010

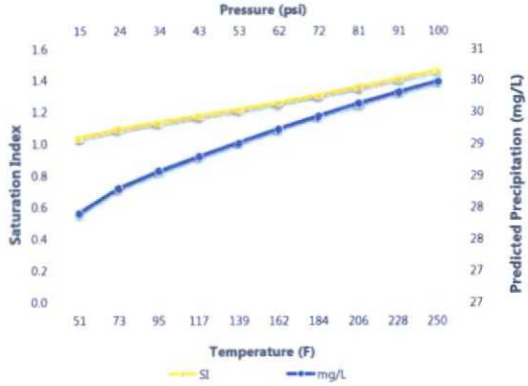
Comments:

SAMPLE ID: 41723 CHEVRON, COTTON HILLS, COTTON HILLS 23-26-27 FED COM 1H

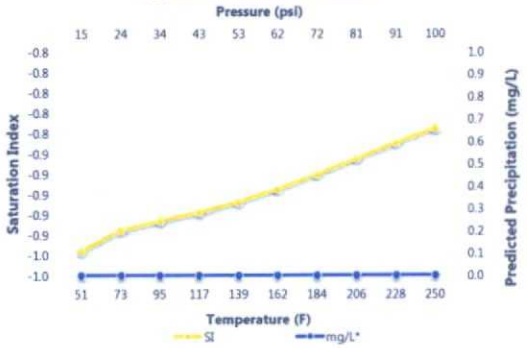
Barite (BaSO4)



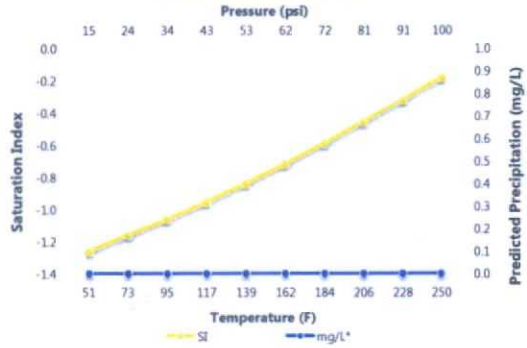
Calcite (CaCO3)



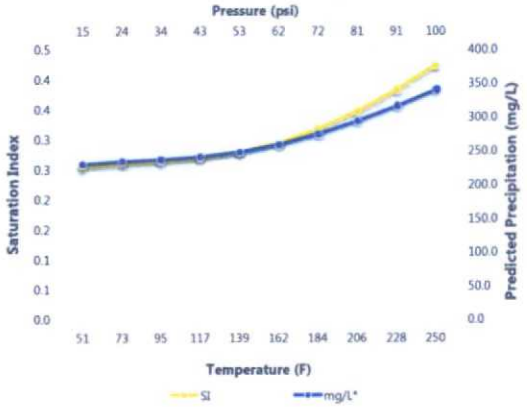
Gypsum (CaSO4·2H2O)



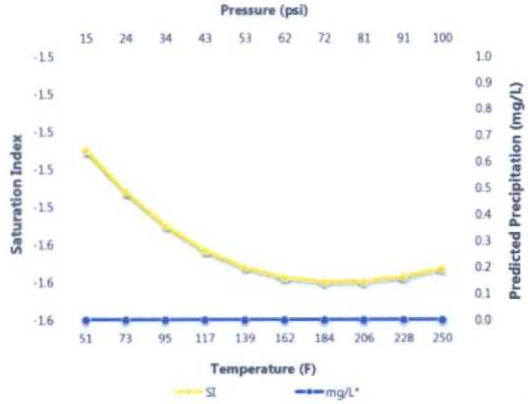
Anhydrite (CaSO4)



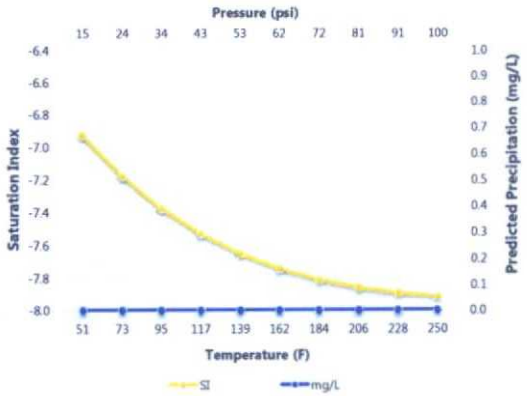
Celestite (SrSO4)



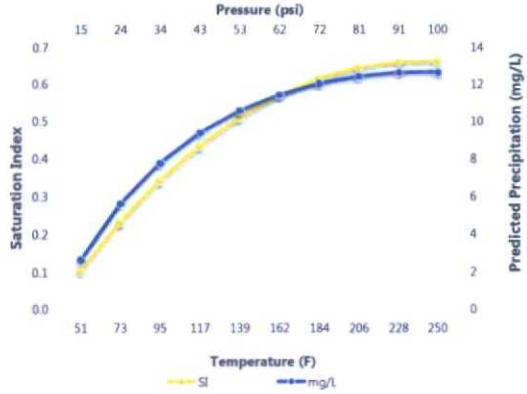
Halite (NaCl)



Iron Sulfide (FeS)



Iron Carbonate (FeCO3)



SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Well Name	API	Lat	long	Sect	Twn	Range	County	St	Field	Formation	samplesource	tds_mgl	chloride_mgl
ANTELOPE RIDGE UNIT	3002521082	32.259	-103.461	34	23 S	34 E	Lea	NM	ANTELOPE RIDGE	DEVONIAN	UNKNOWN	80187	47900
FARNSWORTH FEDERAL	3002511950	32.078	-103.162	4	26 S	37 E	Lea	NM	CROSBY	DEVONIAN	UNKNOWN	31931	20450
ARNOTT RAMSAY NCT B	3002511863	32.092	-103.178	32	25 S	37 E	Lea	NM	CROSBY	DEVONIAN			100382
COPPER	3002511818	32.099	-103.165	28	25 S	37 E	Lea	NM	CROSBY	DEVONIAN	UNKNOWN	27506	15270
STATE NJ A	3002511398	32.165	-103.127	2	25 S	37 E	Lea	NM	JUSTIS NORTH	DEVONIAN	DST	105350	59300
WEST DOLLARHIDE DEVONIAN	3002512297	32.172	-103.076	32	24 S	38 E	Lea	NM	DOLLARHIDE	DEVONIAN	WELLHEAD	50858	30200
STATE B COM	3002509716	32.179	-103.221	36	24 S	36 E	Lea	NM	CUSTER	DEVONIAN	UNKNOWN	176234	107400
E C HILL D FEDERAL	3002510950	32.265	-103.144	34	23 S	37 E	Lea	NM	TEAGUE	DEVONIAN	UNKNOWN	236252	147000
E C HILL B FEDERAL	3002510945	32.266	-103.144	34	23 S	37 E	Lea	NM	TEAGUE	DEVONIAN	UNKNOWN	112959	67390
CLINE FEDERAL	3002510717	32.302	-103.136	14	23 S	37 E	Lea	NM	CLINE	DEVONIAN	PRODUCTION TEST	118979	71780
BELL LAKE UNIT	3002508483	32.328	-103.507	6	23 S	34 E	Lea	NM	BELL LAKE NORTH	DEVONIAN	HEATER/TREATER	71078	42200
											Average	101133	64434

Atkins
ENGINEERING ASSOCIATES INC.

2904 W 2nd St.
Roswell, NM 88201
voice: 575 624.2420
fax: 575 624.2421
www.atkinseng.com

10/21/2015

Matthew Cannon
Petroleum Engineer, EIT
Lonquist & Co., LLC
3345 Bee Cave Rd., Suite 201
Austin, TX 78746

Transmitted via email on the date of this letter to matthew@lonquist.com

Re: Sampling results of well C-2472

Mr. Cannon

Atkins Engineering Associates, Inc. (AEA) has completed the sampling of well C-2472 located in NE/4 SE/4 SW/4 of Section 2, Township 26 South, Range 27 East, N.M.P.M.

On October 12, 2015, and AEA environmental technician mobilized to site. The windmill was actively pumping and overflowing a closed poly tank. The technician was able to take a grab sample from the overflow hose attached to the tank.

Samples were placed in the appropriate bottles, with the appropriate laboratory-provided preservative and placed immediately on ice in a cooler. Samples were shipped on October 12, 2015 to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, NM. Samples arrived on October 13, 2015.

Enclosed please find a copy of the HEAL lab results with chain of custody documentation.

If you, have any questions, please contact me at 575.624.2420 or chris@atkinseng.com.

Sincerely,

Christopher Cortez
Operations Manager
chris@atkinseng.com

Enclosure (1): C-2474 HEAL Lab Results.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 20, 2015

Christopher Cortez
Atkins Engineering Associates
2904 West Second Street
Roswell, NM 88201
TEL: (575) 624-2420
FAX (575) 624-2421

RE: Lonquist Well OrderNo.: 1510592

Dear Christopher Cortez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/13/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Atkins Engineering Associates
Project: Lonquist Well
Lab ID: 1510592-001 **Matrix:** AQUEOUS

Client Sample ID: Well
Collection Date: 10/12/2015 11:47:00 AM
Received Date: 10/13/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	2.2	2.0		mg/L	20	10/16/2015 3:12:29 PM	R29614
Chloride	580	25		mg/L	50	10/17/2015 2:01:13 AM	R29627
Bromide	0.63	0.10		mg/L	1	10/16/2015 3:00:04 PM	R29614
Phosphorus, Orthophosphate (As P)	ND	10	H	mg/L	20	10/16/2015 3:12:29 PM	R29614
Sulfate	2000	25		mg/L	50	10/17/2015 2:01:13 AM	R29627
Nitrate+Nitrite as N	7.0	1.0		mg/L	5	10/16/2015 3:24:54 PM	R29614
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MRA**	
Conductivity	4500	0.010		µmhos/cm	1	10/13/2015 10:58:53 PM	a29526
SM2320B: ALKALINITY						Analyst: **MRA**	
Bicarbonate (As CaCO3)	127.5	20.00		mg/L CaCO3	1	10/13/2015 10:58:53 PM	a29526
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	10/13/2015 10:58:53 PM	a29526
Total Alkalinity (as CaCO3)	127.5	20.00		mg/L CaCO3	1	10/13/2015 10:58:53 PM	a29526
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	3950	20.0	*	mg/L	1	10/16/2015 12:44:00 PM	21872
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **MED**	
Calcium	670	10		mg/L	10	10/16/2015 1:17:34 PM	A29600
Magnesium	200	10		mg/L	10	10/16/2015 1:17:34 PM	A29600
Potassium	9.7	1.0		mg/L	1	10/16/2015 11:43:21 AM	A29600
Sodium	260	10		mg/L	10	10/19/2015 12:23:09 PM	A29635

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1510592**

20-Oct-15

Client: Atkins Engineering Associates

Project: Lonquist Well

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R29614**	RunNo: **29614**
Prep Date:	Analysis Date: **10/16/2015**	SeqNo: **901551** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R29614**	RunNo: **29614**
Prep Date:	Analysis Date: **10/16/2015**	SeqNo: **901552** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	93.8	90	110			
Bromide	2.4	0.10	2.500	0	97.5	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.7	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.5	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R29627**	RunNo: **29627**
Prep Date:	Analysis Date: **10/16/2015**	SeqNo: **902085** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R29627**	RunNo: **29627**
Prep Date:	Analysis Date: **10/16/2015**	SeqNo: **902086** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.8	90	110			
Sulfate	9.7	0.50	10.00	0	96.6	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1510592**

20-Oct-15

Client: Atkins Engineering Associates

Project: Lonquist Well

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A29600**	RunNo: **29600**
Prep Date:	Analysis Date: **10/16/2015**	SeqNo: **901066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A29635**	RunNo: **29635**
Prep Date:	Analysis Date: **10/19/2015**	SeqNo: **902429** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A29635**	RunNo: **29635**
Prep Date:	Analysis Date: **10/19/2015**	SeqNo: **902430** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	52	1.0	50.00	0	103	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1510592**

20-Oct-15

Client: Atkins Engineering Associates

Project: Lonquist Well

Sample ID **mb-2**	SampType: **mblk**	TestCode: **SM2320B: Alkalinity**
Client ID: **PBW**	Batch ID: **a29526**	RunNo: **29526**
Prep Date:	Analysis Date: **10/13/2015**	SeqNo: **898291** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID **lcs-2**	SampType: **lcs**	TestCode: **SM2320B: Alkalinity**
Client ID: **LCSW**	Batch ID: **a29526**	RunNo: **29526**
Prep Date:	Analysis Date: **10/13/2015**	SeqNo: **898292** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.64	20.00	80.00	0	98.3	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1510592**

20-Oct-15

Client: Atkins Engineering Associates

Project: Lonquist Well

Sample ID **MB-21872**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **21872**	RunNo: **29603**
Prep Date: **10/15/2015**	Analysis Date: **10/16/2015**	SeqNo: **901098** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-21872**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **21872**	RunNo: **29603**
Prep Date: **10/15/2015**	Analysis Date: **10/16/2015**	SeqNo: **901099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ATK | Work Order Number: 1510592 | RcptNo: 1

Received by/date: CS 10/13/15

Logged By: Lindsay Mangin 10/13/2015 9:40:00 AM

Completed By: Lindsay Mangin 10/13/2015 10:03:44 AM

Reviewed By: JAG 10/13/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	UPS		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☑ CS 10/13/15 See Below.	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☑	
9. Was preservative added to bottles?	Yes ☑	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: 2 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? Yes
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: CS

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: ____ Date ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks: For dissolved metals analysis, poured off from the unpreserved bottle, filtered and added 0.4ml HNO3 for acceptable pH. Held for 24 hours prior to anal. CS 10/13/15

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Cocd	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Atkins Engineering Associates

Mailing Address: 2904 W 2ND

Phone #: 575 624.2420

email or Fax#: sampling@atkinseng.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush

Project Name: Longuist Well

Project #: longwel_env_15

Project Manager: Christopher Cortez

Sampler: L. Leyba

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
10-12-15	11:47	AQ	WELL	500HDP/250HDP 125 HDP	None / HNO_3 / H_2SO_4	1510592 -001

Analysis Request

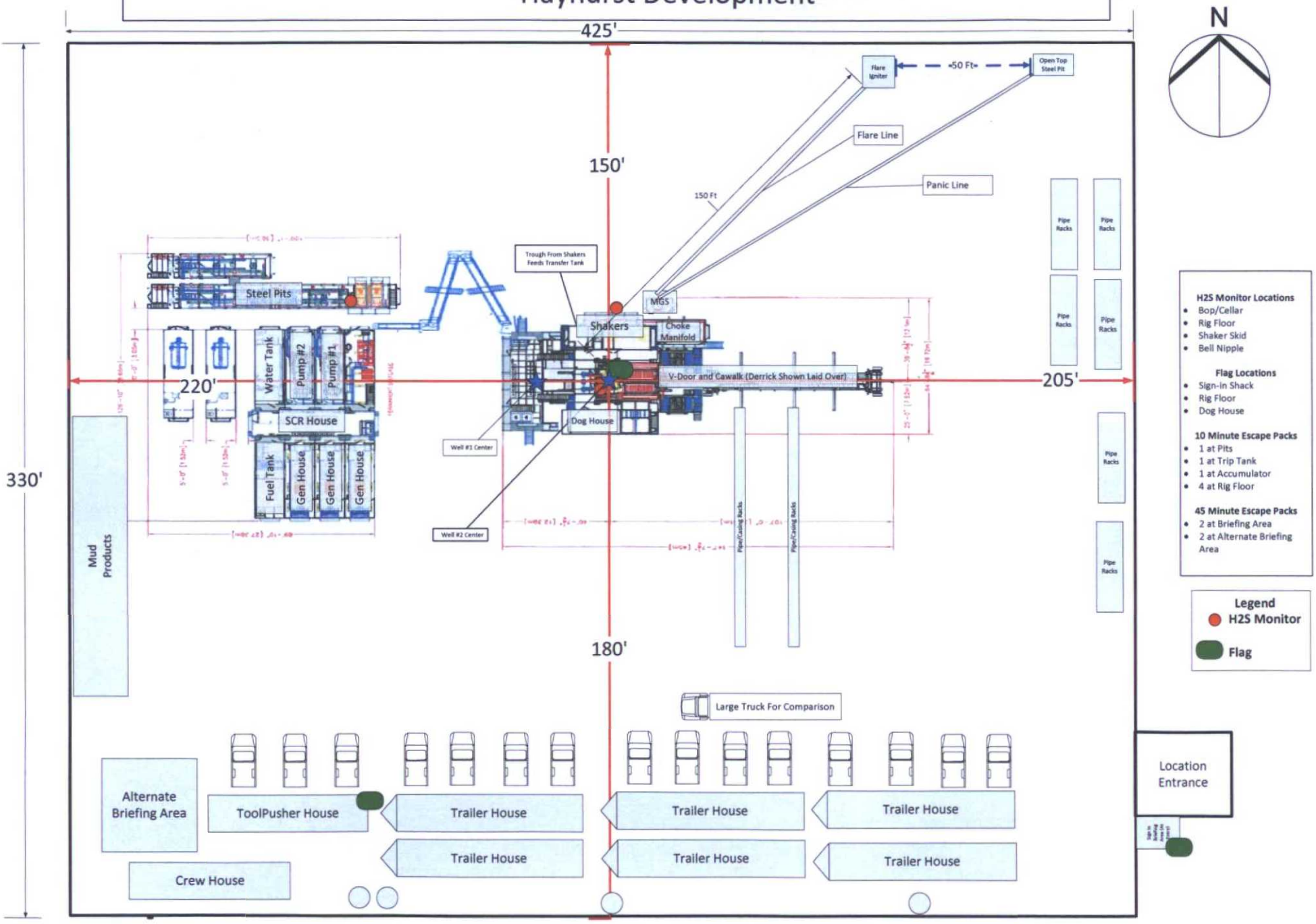
BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Cation/Anion Balance				Air Bubbles (Y or N)
											X				

Date	Time	Relinquished by:	Received by:	Date	Time
10-12-15	3:05	Lupe Leyba	Celina Sanchez	10/13/15	0940
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Ca, Mg, Na, K, Alk, F, Cl, Br, PO_4, NO_3, NO_2, SO_4, eC, TDS

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hayhurst Development



FOR THE EXCLUSIVE USE OF
CHEVRON U.S.A. INC.
I, Robert L. Lastrapes, Registered Professional Land Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

ROBERT L. LASTRAPES
NEW MEXICO
23006
PROFESSIONAL SURVEYOR
1-21-2016

Robert L. Lastrapes
Registration No. 23006

R 27 E

SE/SW
(±3.22 Acres- Proposed Pad)
(±8.03 Acres-Proposed Facility)

LEGEND
- Section Line
- Existing Road & Pad
- Existing Fence Line
- Surface Location

Whites City Road

Sec. 2

State of New Mexico

T 26 S

S51°28'15"W 1775.49'
To Fnd. 1½" Iron Pipe W/Cap at the SW Corner of Section 2

Existing Access Road

PROPOSED SWD FACILITY ±8.03 Acres

700'

500'

Existing Cattle Pen

Existing Fence Line

PROPOSED PAD ±3.22 Acres

330'

425'

Existing Skeen 2 SWD No. 1 Pad

Existing Frac Pond to be Removed

Existing Fence Line

Gravitas 2 State SWD No. 2 Well
400' FSL
1,560' FWL

GRAVITAS 2 STATE SWD NO. 2 WELL	
X=	552,344 NAD 27
Y=	387,394
LAT	32.064948
LONG.	104.164359
X=	593,528 NAD83
Y=	387,451
LAT.	32.065070
LONG.	104.164850
ELEVATION +3211' NAVD 88	

NW SWD FACILITY PAD CORNER (1)		NE SWD FACILITY PAD CORNER (2)	
X=	552,164 NAD 27	X=	552,864 NAD 27
Y=	388,044	Y=	388,044
ELEVATION +3216' NAVD 88		ELEVATION +3208' NAVD 88	
SE SWD FACILITY PAD CORNER (3)		SW SWD FACILITY PAD CORNER (4)	
X=	552,864 NAD 27	X=	552,164 NAD 27
Y=	387,544	Y=	387,544
ELEVATION +3210' NAVD 88		ELEVATION +3217' NAVD 88	
NW SWD PAD CORNER (5)		NE SWD PAD CORNER (6)	
X=	552,124 NAD 27	X=	552,549 NAD 27
Y=	387,544	Y=	387,543
ELEVATION +3217' NAVD 88		ELEVATION +3212 NAVD 88	
SE SWD PAD CORNER (7)		SW SWD PAD CORNER (8)	
X=	552,549 NAD 27	X=	552,124 NAD 27
Y=	387,213	Y=	387,214
ELEVATION +3216' NAVD 88		ELEVATION +3218' NAVD 88	

NAD 27 NEW MEXICO EAST ZONE

Scale: 1" = 200'
200' 0 100' 200'

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

SURFACE USE PLAT PAGE 1 OF 2

CHEVRON U.S.A. INC.

PROPOSED PADS
GRAVITAS 2 STATE SWD NO. 2 WELL
SECTION 2, T26S-R27E
EDDY COUNTY, NEW MEXICO

DRAWN BY: TBD	REVISIONS		
PROJ. MGR.: GDG	No. 1	DATE: 1/28/2016	REVISED BY: GDG
DATE: 12/17/2015	No.	DATE:	REVISED BY:
FILENAME: T:\2015\2153364\DWG\GRAVITAS 2 STATE SWD 2 and FACILITY SUP.dwg			

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

NOTE:
Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance: New Mexico One Call System - www.nmonecall.org.

FOR THE EXCLUSIVE USE OF
CHEVRON U.S.A. INC.
I, Robert L. Lastrapes, Registered Professional Land Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

ROBERT L. LASTRAPES
NEW MEXICO
23006
7-21-2016
PROFESSIONAL SURVEYOR

Robert L. Lastrapes
Registration No. 23006

SURFACE USE PLAT PAGE 2 OF 2

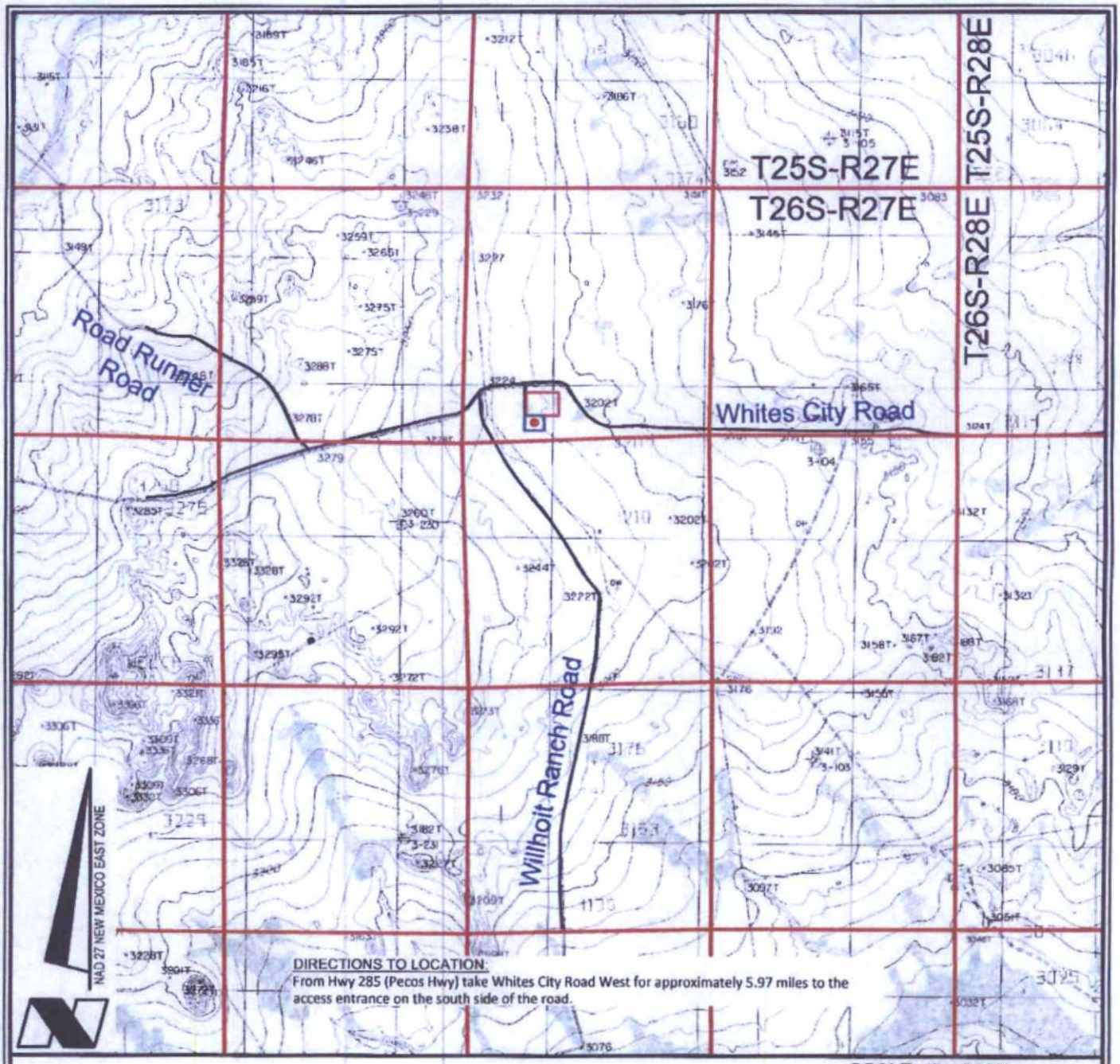
CHEVRON U.S.A. INC.

PROPOSED PADS
GRAVITAS 2 STATE SWD NO. 2 WELL
SECTION 2, T26S-R27E
EDDY COUNTY, NEW MEXICO

DRAWN BY: TBD	REVISIONS		
PROJ. MGR: GDG	No. 1	DATE: 1/28/2016	REVISED BY: GDG
DATE: 12/17/2015	No.	DATE:	REVISED BY:

FILENAME: T:\2015\2153364\DWG\GRAVITAS 2 STATE SWD 2 and FACILITY SUP.dwg

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph 337-237-2200 Fax 337-232-3299
www.fenstermaker.com



VICINITY MAP

SCALE: 1" = 3000'

3000' 0 1500' 3000'

LEGEND

- Proposed Well
- Proposed Drillsite
- Existing Road
- Section Line
- Proposed Facility

CHEVRON U.S.A. INC.

GRAVITAS 2 STATE SWD NO. 2 WELL
LOCATED 400' FSL AND 1560' FWL
SECTION 2, T26S-R27E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER

C.H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

DRAWN BY: TBD	REVISIONS		
PROJ. MGR.: GDG	No. 1	DATE: 1/28/2016	REVISED BY: GDG
DATE: 12/21/2015	No.	DATE:	REVISED BY:
FILENAME: T:\2015\2153364\DWG\GRAVITAS 2 STATE SWD 2 APD.dwg			

Cindy Herrera-Murillo
Regulatory Specialist
Midcontinent BU

Chevron North America
Exploration and Production Company
(A Chevron U.S.A. Inc. Division)
1616 W. Bender Blvd
Hobbs FMT, Hobbs, NM 88240
Tel 575-263-0431
Cherreramurillo@chevron.com

January 12, 2016

State of New Mexico Land Office
Attn: Pete Martinez
P O Box 1148
Santa Fe, New Mexico 87504

Re: Application for Authorization
To Inject as SWD- OCD form C108
Gravitas 2 State SWD #2
Eddy County, New Mexico

Dear Sirs,

Chevron U.S.A. Inc. respectfully requests administrative approval to inject salt water into the Gravitas 2 State SWD #2. (API # Pending), which is located at 400' FSL & 1560" FWL , Unit Letter N, Section 2, T26S-R27E, Eddy County, New Mexico.

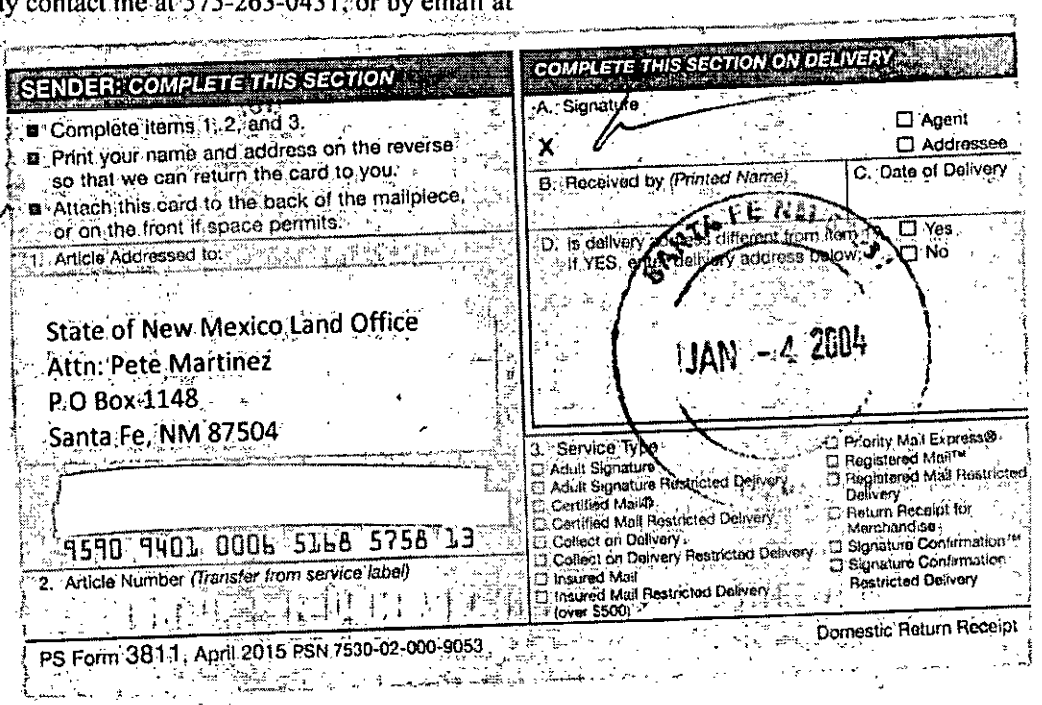
The injection intervals will be in the Devonian Silurian formation from 13,900' – 15,100', through perforations, with maximum anticipated injection rate to 37000 BWPD, and a maximum injection pressure to be confirmed and approved by a step rate test. There will be no CO2 or produced gas injected. There is also no production from this interval in the immediate area.

Attached is an OCD form C-108 with information relative to the SWD injection of the referenced well. A copy of the letter sent to applicable surface land owners and offset operators is included in the attachment. Chevron USA Inc owns 100% working interest as to SW Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico.

Your prompt consideration and approval of this application will be greatly appreciated. If additional information is required, you may contact me at 575-263-0431, or by email at Cherreramurillo@chevron.com.

Sincerely,

Cindy Herrera-Murillo
Regulatory Specialist
Enclosure


SENDER: COMPLETE THIS SECTION
■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
State of New Mexico Land Office
Attn: Pete Martinez
P.O Box 1148
Santa Fe, NM 87504
9590 9401 0006 5168 5758 13
2. Article Number (Transfer from service label)
COMPLETE THIS SECTION ON DELIVERY
A. Signature
X
☐ Agent
☐ Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No
JAN -4 2004
3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery
PS Form 3811, April 2015 PSN 7530-02-000-9053
Domestic Return Receipt

Goetze, Phillip, EMNRD

From: McMillan, Michael, EMNRD
Sent: Thursday, January 14, 2016 3:16 PM
To: Cindy Herrera-Murillo
Cc: Goetze, Phillip, EMNRD; Jones, William V, EMNRD
Subject: Chevron Gravitas 2 SWD Well No.2

Cindy:
I received your SWD application on Thursday January 14, 2016.
I need the following information

- Proof of certified mailing to the surface owner
- Proof of certified mailing to the leasehold of other affected person within ½ mile of the proposed well
- Signed statement from an engineer of geologist that the proposed injection zone is not connected to fresh-water (Part XII)

Thanks

Mike

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Rynni Henderson, being first duly sworn, on oath says:

That she is the Publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 8 2015

December 15 2015

That the cost of publication is **$100.05** and that payment thereof has been made and will be assessed as court costs.

Rynni Henderson

Subscribed and sworn to before me this

17 day of December, 2015

Cynthia Arredondo

My commission expires 2/13/17
Notary Public

OFFICIAL SEAL
Cynthia Arredondo
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 2/13/17

December 8 and 15, 2015

Notice is hereby given of the application of Chevron USA Inc., 15 Smith Road, Midland, TX 79705, to the Oil Conservation of the State of New Mexico, and the Commissioner of Public Lands, State of New Mexico for approval of the Gravitas 2 State SWD #2 to a Salt Water Disposal. The Chevron Gravitas 2 State SWD #2 is located at 400' FSL & 1560' FWL, Unit Letter N, Section 2, T26S-R27E, Eddy County, New Mexico. The well formation will be the Devonian Silurian and injection intervals will be from 13,900 - 15,100 TVD. Interested parties should file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Francis Dr, Santa Fe, New Mexico 87505, **within 15 days.** Inquiries regarding this application should be directed to the Chevron USA Inc. , Attn: Sean Cheben , 1400 Smith St. Rm # 40125, Houston, TX 77002.

Gravitas 2 State SWD #2

Name	Address	City	State	Zip	Certified #
Hanagan Petroleum	PO Box 1737	Roswell	NM	88202	7015 0640 0005 0115 2728
JMC Ritchie	PO Box 953	Midland	TX	79701	7015 0640 0005 0115 2935
Wayne Moore	403 N. Marienfeld	Midland	TX	79701	7015 0640 0005 0115 5942
Great Western Drilling Company	PO Box 1659	Midland	TX	79702	7015 0640 0005 0115 2959
Marline Petroleum Corp	4900 Capitol Bank Plaza	Houston	TX	77002	7015 0640 0005 0115 2966
Abo Petreluem Corp	105 S 4th St	Artesia	NM	88210	7015 0640 0005 0115 2973
Jubilee Energy Corp	4000 N. Big Spring , Ste 109	Midland	TX	79705	7015 0640 0005 0115 2980
COG Operating LLC	550 W. Texas Ave, Ste 100	Midland	TX	79701	7015 0640 0005 0115 2997
Mewbourne Oil Company	500 W. Texas Ave #1020	Midland	TX	79701	7015 0640 0005 0115 3000
Circlie Diamond Drilling LLC	910 W. Pierce	Carlsbad	NM	88220	7015 0640 0005 0115 3017
Chamber & Kennedy	PO Drawer 3546	Midland	TX	79702	7015 0640 0005 0115 3024

OCD Permitting

Section : 02-26S-27E

Type: Normal

Total Acres: 640

County: Eddy (15)

D (D) State [1] State [2] (15) 40	C (C) State [1] State [2] (15) 40	B (B) State [1] State [2] (15) 40	A (A) State [1] State [2] (15) 40
E (E) State [1] State [2] (15) 40	F (F) State [1] State [2] (15) 40	G (G) State [1] State [2] (15) 40	H (H) State [1] State [2] (15) 40
L (L) State [1] State [2] (15) 40	K (K) State [1] State [2] (15) 40	J (J) State [1] State [2] (15) 40	I (I) State [1] State [2] (15) 40
M (M) State [1] State [2] (15) 40	N (N) State [1] State [2] (15) 40	O (O) State [1] State [2] (15) 40	P (P) State [1] State [2] (15) 40

Note [1] = Surface Owner Rights

Note [2] = Sub-Surface Mineral Rights

Land Restrictions

No land restrictions found for this section.

Return to Search

1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

C-108 Review Checklist: Received 3/4/2016 Add. Request: 3/21/2016 Reply Date: 3/24/2016 Suspended: [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No. 2 Well Name(s): Gwaites SWD

API : 30-0 25-Pending Spud Date: TBD New or Old: _____ (UIC Class II Primacy 03/07/1982)

Footages 400 FSL 1560 FWL Lot ___ or Unit N Sec 2 Tsp 26S Rge 27E County Eddy

General Location: ~13 miles/SW Malaga Pool: SWD; Devonian Pool No.: 97869

BLM 100K Map: Carlsbad Operator: Chevron USA Inc OGRID: 4323 Contact: Cindy Herrera-Murillo, Permitting Specialist

COMPLIANCE RULE 5.9: Total Wells: 2084 Inactive: 2 Fincl Assur: Y Compl. Order? NA IS 5.9 OK? Y Date: 3-22-2016

WELL FILE REVIEWED ○ Current Status: Proposed

WELL DIAGRAMS: NEW: Proposed ✓ or RE-ENTER: Before Conv. ○ After Conv. ○ Logs in Imaging: NA

Planned Rehab Work to Well: CBL from the Liner to the TOC 5½"

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)		Cement (Sx or Cf)	Cement Top and Determination Method
Planned or Existing Surface	20" / 18 5/8	450	Stage Tool	422	Surface / Visual
Planned or Existing Interm/Prod	14 3/4 / 13 3/8	7600	2400	1660	Surface / Visual
Planned or Existing Interm/Prod	11 3/4 / 10 3/4	9200		297	7300
Planned or Existing Prod/Liner	9 3/8 / 8 5/8	11810		280	8900
Planned or Existing Liner	7 1/2 / 6 5/8	14000		55	12500
Planned or Existing OH / PERF	13900 / 15100		Inj Length	1200	

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.	[redacted]	FS	13900
Confining Unit: Litho. Struc. Por.		WC	13700
Proposed Inj Interval TOP:	13900		
Proposed Inj Interval BOTTOM:	15100		
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.	[redacted]		

Completion/Operation Details:

Drilled TD 15100 PBTD _____

NEW TD _____ NEW PBTD _____

NEW Open Hole ✓ or NEW Perfs ○

Tubing Size 4½ in. Inter Coated? Y

Proposed Packer Depth 13800 ft ✓

Min. Packer Depth ~~13500~~ 13800 (100-ft limit)

Proposed Max. Surface Press. 2780 psi

Admin. Inj. Press. 2780 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? ___ BLM Sec Ord ○ WIPP ○ Noticed? ___ Salt/Salado T: ___ B: ___ NW: Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth ~300-400 HYDRO AFFIRM STATEMENT By Qualified Person ✓

NMOSE Basin: Carlsbad CAPITAN REEF: thru adj NA No. Wells within 1-Mile Radius? 1 FW Analysis NA

Disposal Fluid: Formation Source(s) Bonespring / Wolfcamp Analysis? Y On Lease ○ Operator Only ○ or Commercial ✓

Disposal Int: Inject Rate (Avg/Max BWPD): 37K Protectable Waters? ___ Source: ___ System: Closed or Open

HC Potential: Producing Interval? NA Formerly Producing? ___ Method: Logs/DST/P&A/Other ___ 2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Y Well List? NA Total No. Wells Penetrating Interval: 0 Horizontals? 0

Penetrating Wells: No. Active Wells 0 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

Penetrating Wells: No. P&A Wells 0 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

NOTICE: Newspaper Date 12-15-2015 Mineral Owner NMSLO Surface Owner NMSLO N. Date 1-12-2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: NMOCD, Chevron, Great Western, COG N. Date 2-16-2016

Order Conditions: Issues: _____

Add Order Cond: Pay zone ≥ 7500' TVD.