

AE Order Number Banner

Application Number: pMSG2334737385

SWD-2584

MACK ENERGY CORP [13837]

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & 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

Applicant: Mack Energy Corporation **OGRID Number:** 013837
Well Name: Labrador SWD #1Y Amended SWD-2488 **API:** 30-005-64374
Pool: SWD; Devonian **Pool Code:** 96101

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION
 INDICATED BELOW**

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

B. Check one only for [I] or [II]

[I] Commingling – Storage – Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX☐ PMX☒ SWD☐ IPI☐ EOR☐ PPR**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☒ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☒ Application requires published noticeD. ☒ Notification and/or concurrent approval by SLOE. ☐ Notification and/or concurrent approval by BLMF. ☒ Surface ownerG. ☒ For all of the above, proof of notification or publication is attached, and/or,H. ☐ No notice required**FOR OCD ONLY**☐

Notice Complete

☐Application
Content
Complete

- 3) 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.

Deana Weaver

Print or Type Name

9/28/2023

Date

575-748-1288

Phone Number

dweaver@mec.com

e-mail Address

Signature

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: Mack Energy Corporation
ADDRESS: P.O. Box 960 Artesia, NM 88210
CONTACT PARTY: Deana Weaver PHONE: 575-748-1288
- 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: Deana Weaver TITLE: Regulatory Tech II
SIGNATURE: Deana Weaver DATE: 9/28/2023
E-MAIL ADDRESS: dweaver@mec.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

Side 2

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.
- (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.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the 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.

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.

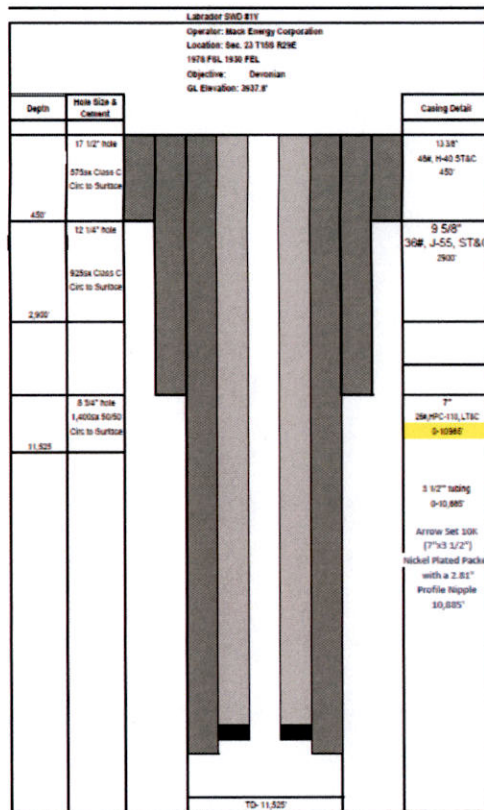
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Mack Energy CorporationWELL NAME & NUMBER: Labrador SWD #1Y Amend SWD-2488WELL LOCATION: 1978 FSL 1930 FEL J 23 15S 29E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2" Casing Size: 13 3/8" @ 450'Cemented with: 575 SX. or ft³Top of Cement: 0 Method Determined: CircIntermediate CasingHole Size: 12 1/4" Casing Size: 9 5/8" @ 2900'Cemented with: 925 SX. or ft³Top of Cement: 0 Method Determined: CircProduction CasingHole Size: 8 3/4" Casing Size: 7" @ 10,985'Cemented with: 1400sx SX. or ft³Top of Cement: 0 Method Determined: CircTotal Depth: 11,525'Injection Interval10,985' feet to 11,525' Open Hole

(Perforated or Open Hole; indicate which)



Side 2

INJECTION WELL DATA SHEETTubing Size: 3 1/2 " Lining Material: IPCType of Packer: Arrow Set 10K (7" x 3 1/2") Nickel Plated Packer w/ 2.81" Profile NipplePacker Setting Depth: 10,885'Other Type of Tubing/Casing Seal (if applicable): N/A**Additional Data**

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

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

2. Name of the Injection Formation: Devonian

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

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. _____

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: L. Miss 10,435', Devonian 10,985', Montoya 11,525', Simpson 11,725'

VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;
Respectively, 10,000 BWPD and 15,000 BWPD
2. The system is closed or open;
Closed
3. Proposed average and maximum injection pressure;
1,000psi average-2,030psi maximum
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water;
We will be re-injecting produced water
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;
N/A

VIII. GEOLOGICAL DATA

1. Lithologic Detail; Dolomite
2. Geological Name; Devonian
3. Thickness; 540'
4. Depth; 11,525' (Open Hole 10,985-11,525')

IX. PROPOSED STIMULATION PROGRAM

1. To be treated with 10000 gallons 15% acid

X. LOGS AND TEST DATA

1. Well data will be filed with the OCD.

XI. ANALYSIS OF FRESHWATER WELLS

N/A

Additional Information

Waters Injected:

San Andres


XII. AFFIRMATIVE STATEMENT

RE: Labrador SWD #1

We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

Mack Energy Corporation

Date: 3/17/22


Charles Sadler, Geologist

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 30-005-64374		² Pool Code 96101		³ Pool Name SWD; Devonian	
⁴ Property Code 333611		⁵ Property Name LABRADOR SWD			⁶ Well Number 1Y
⁷ OGRID No. 13837		⁸ Operator Name MACK ENERGY CORPORATION			⁹ Elevation 3937.8
¹⁰ Surface Location					
UL or lot no. J	Section 23	Township 15 S	Range 29 E	Lot Idn	Feet from the 1978
					North/South line SOUTH
					Feet from the 1930
					East/West line EAST
					County CHAVES
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
¹² Dedicated Acres 40		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ Order No.	

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.

<p>N89°53'16"E 2638.11 FT</p> <p>NW CORNER SEC. 23 LAT. = 33.0087818°N LONG. = 104.0078257°W</p> <p>NMSP EAST (FT) N = 730885.92 E = 641120.85</p>		<p>N89°55'34"E 2637.68 FT</p> <p>N/4 CORNER SEC. 23 LAT. = 33.0087732°N LONG. = 103.9992221°W</p> <p>NMSP EAST (FT) N = 730891.08 E = 643758.26</p>		<p>NE CORNER SEC. 23 LAT. = 33.0087593°N LONG. = 103.9906199°W</p> <p>NMSP EAST (FT) N = 730894.48 E = 646395.26</p>	
<p>N00°40'26"W 2647.25 FT</p>		<p>NMNM 138832</p>		<p>S00°11'49"E 2647.39 FT</p>	
<p>W/4 CORNER SEC. 23 LAT. = 33.0015079°N LONG. = 104.0077509°W</p> <p>NMSP EAST (FT) N = 728239.53 E = 641151.97</p>		<p>SURFACE LOCATION</p> <p>LABRADOR SWD 1Y ELEV. = 3937.8 LAT. = 32.9996369°N (NAD83) LONG. = 103.9969106°W NMSP EAST (FT) N = 727569.29 E = 644477.49</p>		<p>E/4 CORNER SEC. 23 LAT. = 33.0014847°N LONG. = 103.9906184°W</p> <p>NMSP EAST (FT) N = 728247.79 E = 646404.36</p>	
<p>N00°36'44"W 2658.49 FT</p>		<p>NMNM 066483</p>		<p>S00°13'32"E 2650.68 FT</p>	
<p>SW CORNER SEC. 23 LAT. = 32.9942030°N LONG. = 104.0076851°W</p> <p>NMSP EAST (FT) N = 725581.88 E = 641180.36</p>		<p>S/4 CORNER SEC. 23 LAT. = 32.9942016°N LONG. = 103.9991564°W</p> <p>NMSP EAST (FT) N = 725589.58 E = 643795.24</p>		<p>SE CORNER SEC. 23 LAT. = 32.9942011°N LONG. = 103.9906126°W</p> <p>NMSP EAST (FT) N = 725597.82 E = 646414.78</p>	
<p>S89°49'53"W 2615.57 FT</p>		<p>S89°49'11"W 2620.23 FT</p>		<p>S00°13'32"E 2650.68 FT</p>	

17 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.

Deana Weaver 9/28/2023

Signature _____ Date _____

Printed Name **Deana Weaver**


E-mail Address **dweaver@mec.com**

18 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.

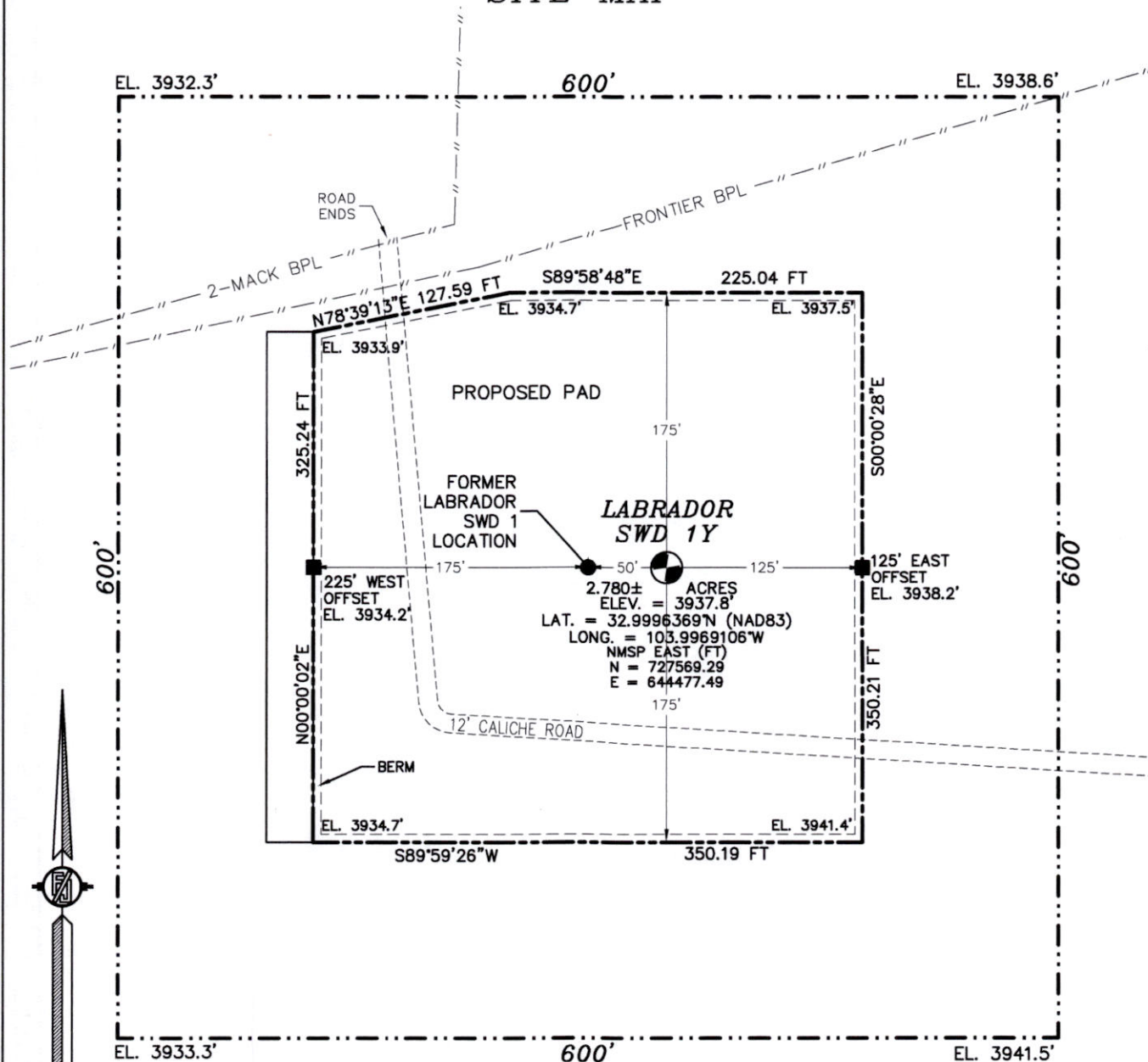
SEPTEMBER 12, 2022

Date of Survey _____

Signature and Seal of Professional Surveyor: 

Certificate Number: **WILLIAM F. JARAMILLO, SLS 12797**

**SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SITE MAP**



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 82 & CO. RD. 217 (HAGERMAN CUTOFF), GO NORTH ON CO. RD. 217 APPROX. 12 MILES, TURN LEFT (WEST) ON 12' CALICHE LEASE ROAD AND GO APPROX. 0.6 OF A MILE TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I HAVE PERSONALLY CONDUCTED THIS SURVEY, THAT THE INFORMATION HEREON IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT I AM AWARE OF THE MINIMUM STANDARDS FOR THIS SURVEY.

FILMON F. JARAMILLO, REGISTERED PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

**MACK ENERGY CORPORATION
LABRADOR SWD 1Y**

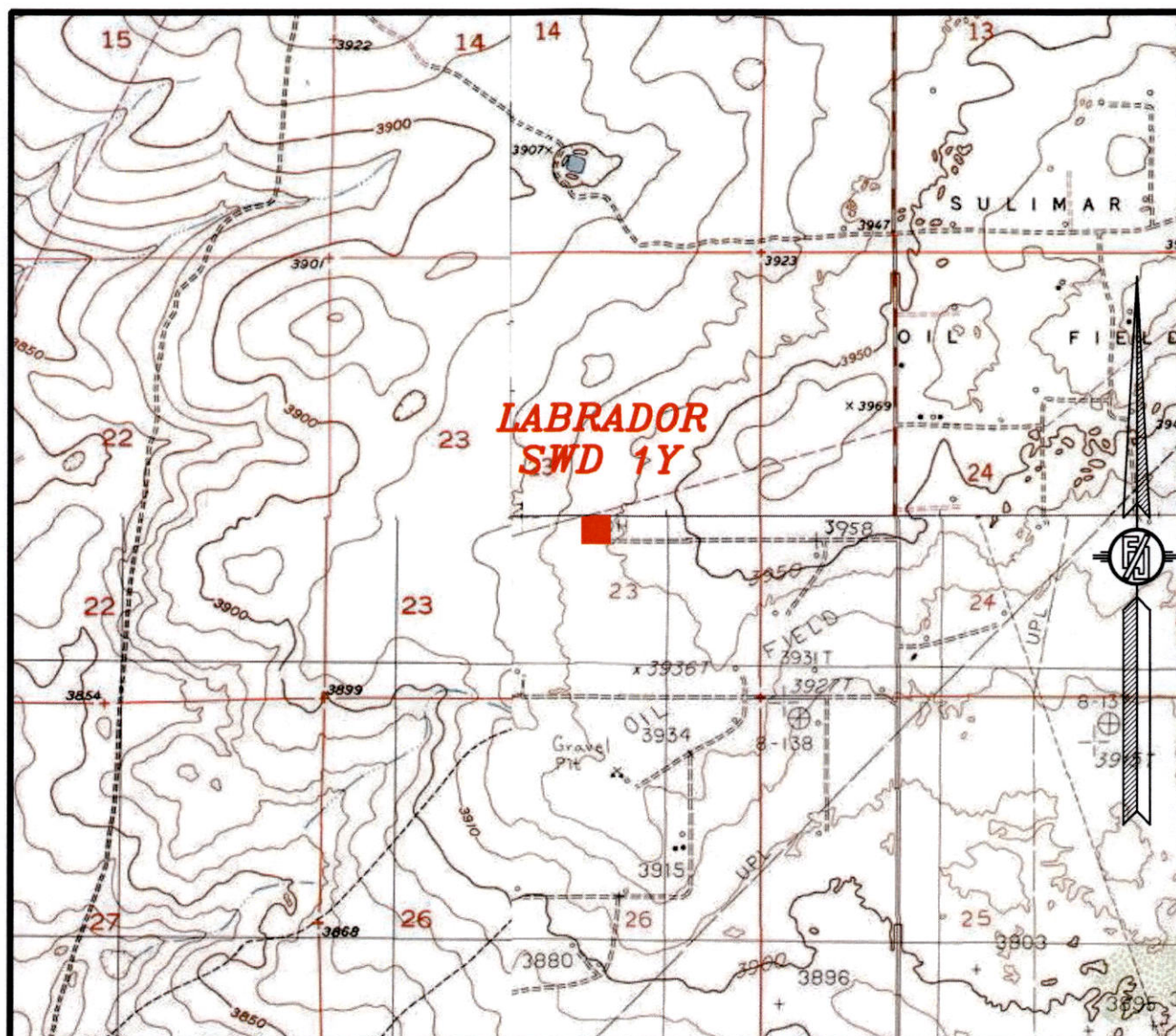
**LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO**

SEPTEMBER 12, 2023

SURVEY NO. 9361A

CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
HENSHAW TANK
CEDAR POINT
KING CAMP
BASIN WELL

NOT TO SCALE

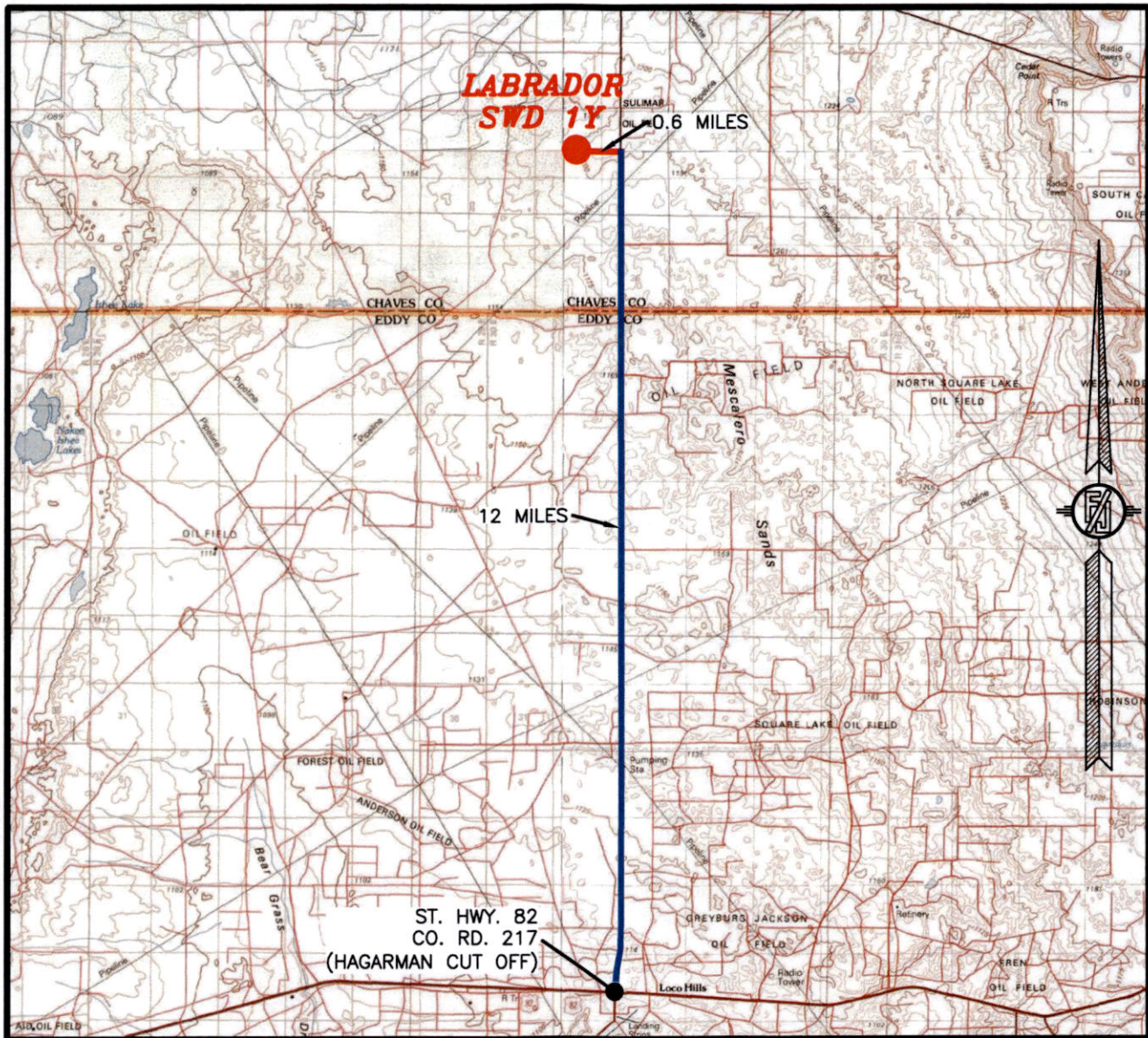
MACK ENERGY CORPORATION
LABRADOR SWD 1Y
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SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2023

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 **CARLSBAD, NEW MEXICO**

SURVEY NO. 9361A

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 82 & CO. RD. 217 (HAGERMAN CUTOFF), GO NORTH ON CO. RD. 217 APPROX. 12 MILES, TURN LEFT (WEST) ON 12' CALICHE LEASE ROAD AND GO APPROX 0.6 OF A MILE TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

**MACK ENERGY CORPORATION
LABRADOR SWD 1Y**

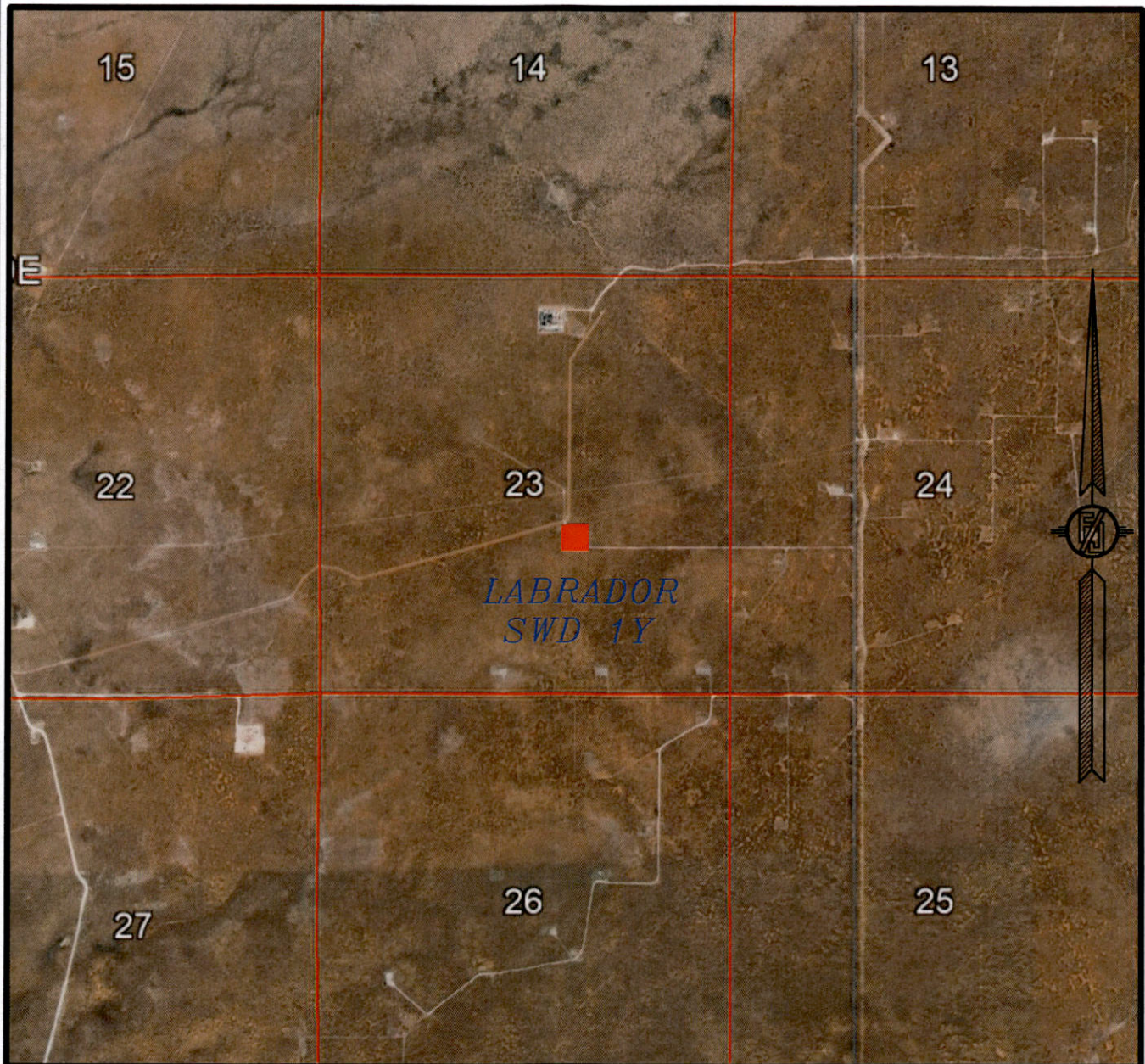
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SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2023

SURVEY NO. 9361A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DEC. 2019

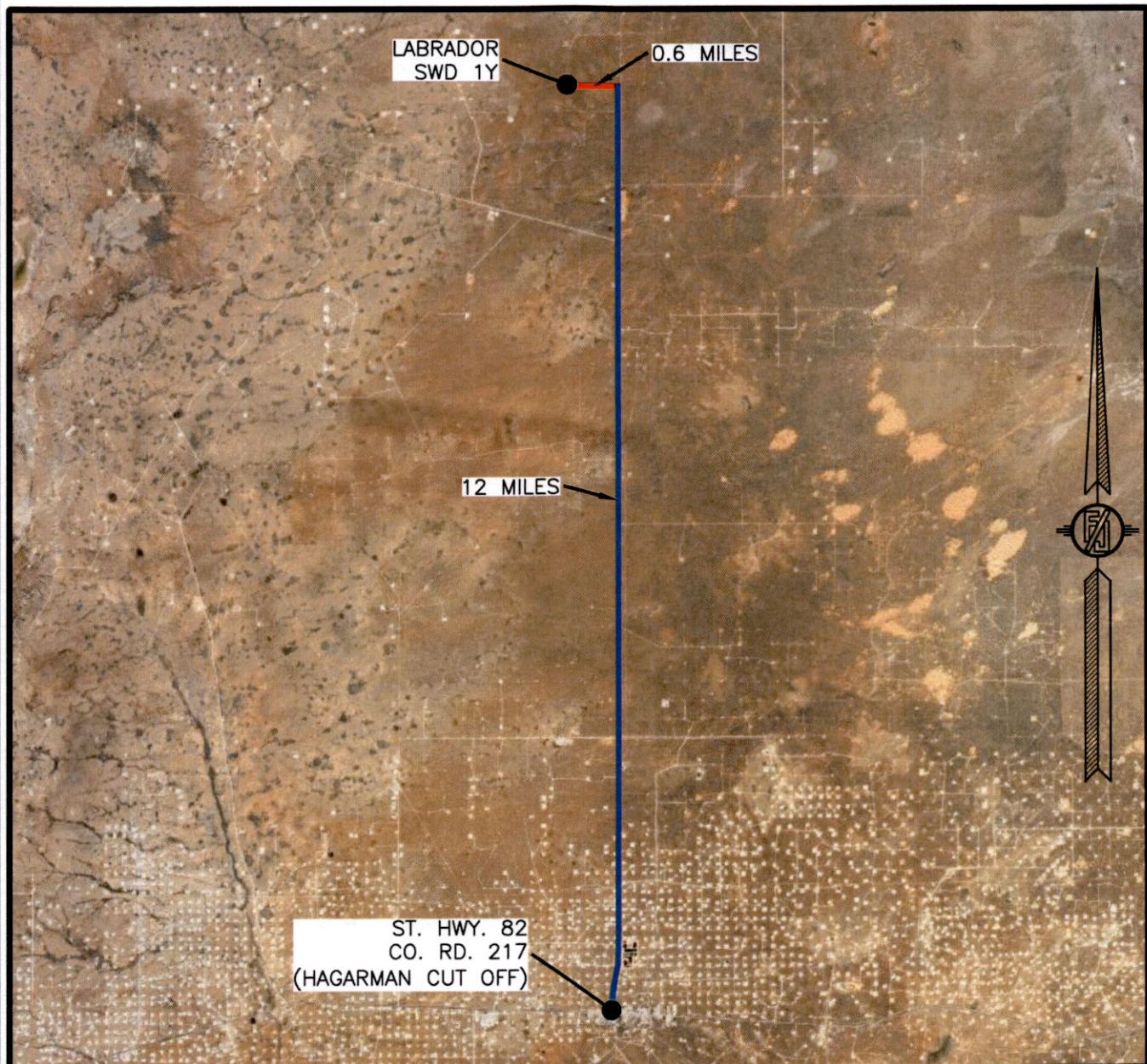
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CHAVES COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2023

SURVEY NO. 9361A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 **CARLSBAD, NEW MEXICO**

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DEC. 2019

MACK ENERGY CORPORATION
LABRADOR SWD 1Y
LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
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SEPTEMBER 12, 2023

SURVEY NO. 9361A

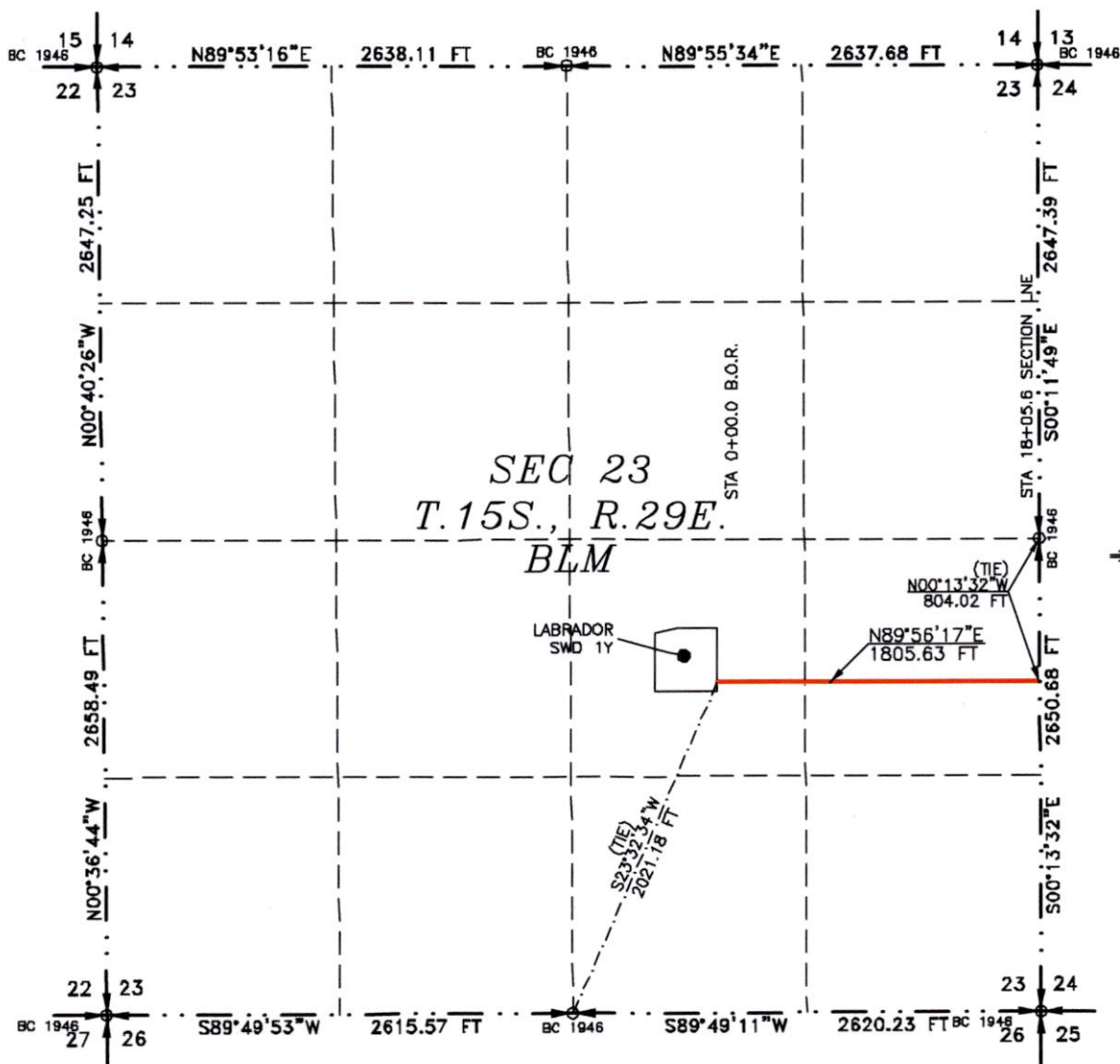
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 **CARLSBAD, NEW MEXICO**

ACCESS ROAD PLAT

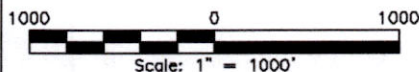
EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023**



SEE NEXT SHEET (2-4) FOR DESCRIPTION

**GENERAL NOTES**

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-4

MADRON SURVEYING, INC. 301 SOUTH CANAL, CARLSBAD, NEW MEXICO 88220 Phone (575) 234-3341

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 9361A

MADRON SURVEYING, INC. 301 SOUTH CANAL, CARLSBAD, NEW MEXICO 88220 Phone (575) 234-3341

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SW/4 SE/4 OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S23°32'34"W, A DISTANCE OF 2021.18 FEET;
 THENCE N89°56'17"E A DISTANCE OF 1805.63 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE EAST QUARTER CORNER OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°13'32"W, A DISTANCE OF 804.02 FEET;

SAID STRIP OF LAND BEING 1805.63 FEET OR 109.43 RODS IN LENGTH, CONTAINING 1.244 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SE/4	492.92 L.F.	29.87 RODS	0.339 ACRES
NE/4 SE/4	1312.71 L.F.	79.56 RODS	0.904 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023

MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (575) 234-3341

SURVEY NO. 9361A

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 2-4

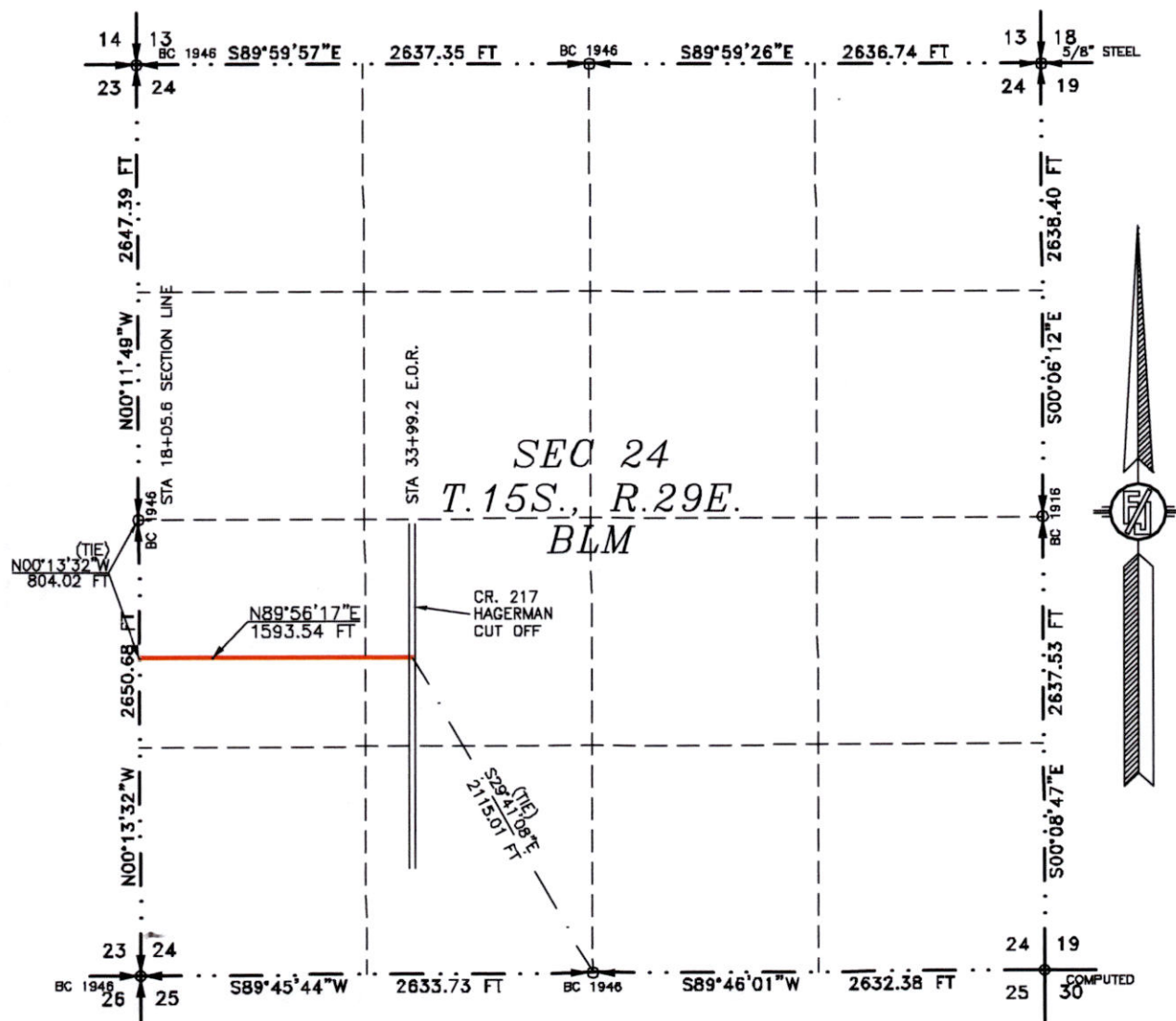
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

ACCESS ROAD PLAT

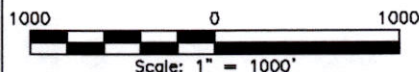
EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023



SEE NEXT SHEET (4-4) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 3-4

MADRON SURVEYING, INC. 301 SOUTH GARDEN, ALBUQUERQUE, NEW MEXICO
(505) 231-1541

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD.

NEW MEXICO, THIS 26 DAY OF SEPTEMBER 2023

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 9361A

301 SOUTH WALSH ST.
SARASOTA, NEW MEXICO

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 SW/4 OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE WEST QUARTER CORNER OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°13'32"W, A DISTANCE OF 804.02 FEET;
 THENCE N89°56'17"E A DISTANCE OF 1593.54 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S29°41'08"E, A DISTANCE OF 2115.01 FEET;

SAID STRIP OF LAND BEING 1593.54 FEET OR 96.58 RODS IN LENGTH, CONTAINING 1.097 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4	1317.95 L.F.	79.88 RODS	0.908 ACRES
NE/4 SW/4	275.58 L.F.	16.70 RODS	0.190 ACRES

GENERAL NOTES

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- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 4-4

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220
 (575) 234-3341

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 12TH DAY OF SEPTEMBER 2023

FILIMON F. JARAMILLO
 12797
 NEW MEXICO PROFESSIONAL SURVEYOR
 MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (575) 234-3341

SURVEY NO. 9361A

301 SOUTH CANAL CARLSBAD, NEW MEXICO
 (575) 234-3341

Labrador SWD #1Y						
Operator: Mack Energy Corporation						
Location: Sec. 23 T15S R29E						
1978 FSL 1930 FEL						
Objective: Devonian						
GL Elevation: 3937.8'						
Depth	Hole Size & Cement					Casing Detail
450'	17 1/2" hole 575sx Class C Circ to Surface					13 3/8" 48#, H-40 ST&C 450'
2,900'	12 1/4" hole 925sx Class C Circ to Surface					9 5/8" 36#, J-55, ST&C 2900'
11,525	8 3/4" hole 1,400sx 50/50 Circ to Surface					7" 26#, HPC-110, LT&C 0-10985'
						3 1/2" tubing 0-10,885' Arrow Set 10K (7"x3 1/2") Nickel Plated Packer with a 2.81" Profile Nipple 10,885'
TD- 11,525'						

Labrador SWD #1Y
1978 FSL 1930 FEL
Sec. 23 T15S R29E
Formation Tops

Quaternary	Surface
Top Salt	462'
Base Salt	1023'
Yates	1187'
San Andres	2605'
Glorieta	4060'
Tubb	5382'
Abo	6155'
Wolfcamp	7495'
Atoka	9689'
U. Miss	10,200'
L. Miss	10,435'
Devonian	10,985'
Montoya	11,525'
Simpson	11,725'
Ellenburger	11,992'

AFFIDAVIT OF PUBLICATION
STATE OF NEW MEXICOI, Merle Alexander
Legals Clerk

Of the Roswell Daily Record, a daily newspaper published at Roswell, New Mexico do solemnly swear that the clipping hereto attached was published in the regular and entire issue of said paper and not in a supplement thereof for a period of:

One time with the issue dated

October 10th, 2023

Merle Alexander

Clerk

Sworn and subscribed to before me

this 10th day of October, 2023

Claudia Martinez

Notary Public



LEGALS

Legal Notice...

Publish October 10th, 2023

Legal Notice

Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-1370, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced water into the Labrador SWD #1Y 1978 FSL 1930 FEL of Section 23, T15S, R29E, NMPM, Chaves County, New Mexico. The water will be injected into the Devonian at a disposal depth of 10,985-11,525'. Water will be injected at a maximum surface pressure of 2,030# and a maximum injection rate of 10,000-15,000 BWPD. Any interest party with questions or comments may contact Deana Weaver at Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-1370 or call 575-748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of publication of this notice.

Legal Notice...

Publish October 10th, 2023

Legal Notice

Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-1370, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced water into the Labrador SWD #1Y 1978 FSL 1930 FEL of Section 23, T15S, R29E, NMPM, Chaves County, New Mexico. The water will be injected into the Devonian at a disposal depth of 10,985-11,525'. Water will be injected at a maximum surface pressure of 2,030# and a maximum injection rate of 10,000-15,000 BWPD. Any interest party with questions or comments may contact Deana Weaver at Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-1370 or call 575-748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of publication of this notice.

Name	Address	City	State	Zip	Certified Mail Id
Cross Border Resources Inc.	14282 Gillis Rd	Farmers	TX	75244-3715	7022 2410 0002 1825 3173
Chisos LTD	1331 Lamar St. Ste 1077	Houston	TX	77010-3135	7022 2410 0002 1825 3180
Apache Corporation	2000 Post Oak Blvd Ste 100	Houston	TX	77056-4400	7022 2410 0002 1825 3197
Bureau of Land Management	2909 W. 2nd St	Roswell	NM	88201-1287	7019 1120 0000 0728 4790
Chase Oil Corporation	11352 Lovington HWY	Artesia	NM	88210	
Energy Reserves Group LLC	333 Clay St Ste 4400	Houston	TX	77002-4105	7022 2410 0002 1825 3203
Caza Petroleum LLC	16945 NorthChase Dr Ste 1430	Houston	TX	77060-2133	7022 2410 0002 1825 3210
Wise Oil & Gas No 8 LTD	6851 NE Loop 820 Ste 200	North Richland Hills	TX	76181-6641	7022 2410 0002 1825 3227
Read & Stevens Inc	400 N. Pennsylvania Ste 1000	Roswell	NM	88201	7022 2410 0002 1825 3234
Bam Permian Operating LLC	4418 Briarwood Ave Ste 110 PMB 53	Midland	TX	87508	7022 2410 0002 1825 3241
Occidental Permian LP	5 Greenway Plz Ste 110	Houston	TX	77046-0521	7022 2410 0002 1825 3258
EOG Resources INC	105 S 4th St	Artesia	NM	88210-2177	7022 2410 0002 1825 3265
Oxy Y-1 Co	5 Greenway Plz Ste 110	Houston	TX	77046-0521	7022 2410 0002 1825 3272



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 748-7374

March 23, 2022

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

RE: Mack Energy Corporation & Chase Affiliates

Dear Mr. McClure:

Mack Energy Corporation is a Chase Family owned entity. The following Chase individuals or companies are all affiliates of Mack Energy Corporation and usually own an interest in wells drilled and/or operated by Mack Energy Corporation.

- Mack C. Chase Trust
- Robert C. Chase or RDC Minerals LLC
- Richard L. Chase or Ventana Minerals LLC
- Gerene Dianne Chase Ferguson or DiaKan Minerals LLC
- Broken Arrow Royalties LLC
- Chase Oil Corporation
- Sendero Energy LLC
- Katz Resources LLC
- M Squared Energy LLC

All of these family members and companies all office in the same building so notifications can be hand delivered; therefore we request that the certified mail process be waived when these parties are involved.

If you have any questions or need additional information please do not hesitate to contact me. Your assistance is greatly appreciated.

Sincerely,
Mack Energy Corporation

A handwritten signature in black ink that reads "Staci Sanders". The signature is written in a cursive, flowing style.
Staci Sanders
Land Manager

/ss

Re: Application of Mack Energy Corporation for administrative approval for Central Tank Battery and Off Lease Measurement of oil and gas production at a CTB Facility located in Section 28, Township 15S Range 29E, NMPM, Chaves County, New Mexico.

List of Affected Parties

Sendero Energy LLC

Katz Resources LLC

M Squared Energy LLC

Chase Oil Corp

Robert C Chase

Broken Arrow Royalties LLC

Ventana Minerals LLC

DiaKan Minerals LLC

Bureau of Land Management



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7019 1120 0000 0728 4790

Return Receipt Requested

Bureau of Land Management
2909 W. 2nd St.
Roswell, NM 88201-1287

To all Interest Owners:

Enclosed for your review is a copy of Mack Energy Corporation's application for a Devonian SWD well. Produced water will be injected at a proposed depth of 10,985-11,525'. The Labrador SWD #1Y located 1978 FSL & 1930 FEL, Sec. 23 T15S R29E, Chaves County.

The letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this well as a water disposal. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.

Sincerely,

Mack Energy Corporation

A handwritten signature in blue ink that reads "Deana Weaver". The signature is written in a cursive, flowing style.

Deana Weaver
Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 3173

Return Receipt Requested

Cross Border Resources Inc.
14282 Gillis Rd.
Farmers, TX 75244-3715

To all Interest Owners:

Enclosed for your review is a copy of Mack Energy Corporation's application for a Devonian SWD well. Produced water will be injected at a proposed depth of 10,985-11,525'. The Labrador SWD #1Y located 1978 FSL & 1930 FEL, Sec. 23 T15S R29E, Chaves County.

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Deana Weaver
Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3180

Return Receipt Requested

Chisos LTD
1331 Lamar St. Ste. 1077
Houston, TX 77010-3135

To all Interest Owners:

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Regulatory Technician II

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Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3197

Return Receipt Requested

Apache Corporation
2000 Post Oak Blvd Ste 100
Houston, TX 77056-4400

To all Interest Owners:

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Regulatory Technician II

DW/

Attachments



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Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3203

Return Receipt Requested

Energy Reserves Group LLC
333 Clay St Ste 4400
Houston, TX 77002-4105

To all Interest Owners:

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Deana Weaver
Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3210
Return Receipt Requested

Caza Petroleum LLC
16945 NorthChase Dr. Ste 1430
Houston, TX 77060-2133

To all Interest Owners:

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Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3227
Return Receipt Requested

Wise Oil & Gas No 8 LTD
6851 NE Loop 820 Ste 200
North Richardland Hills, TX 76181-6641

To all Interest Owners:

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Regulatory Technician II

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Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3234
Return Receipt Requested

Read & Stevens Inc
400 N. Pennsylvania Ste 1000
Roswell, NM 88201

To all Interest Owners:

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Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3241

Return Receipt Requested

Bam Permian Operating LLC
4418 Briarwood Ave Ste 110 PMB 53
Midland, TX 87508

To all Interest Owners:

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Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3258
Return Receipt Requested

Occidental Permian LP
5 Greenway Plz Ste 110
Houston, TX 77046-0521

To all Interest Owners:

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Regulatory Technician II

DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3265
Return Receipt Requested

EOG Resources INC
105 S. 4th Street
Artesia, NM 88210-2177

To all Interest Owners:

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DW/

Attachments



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

October 18, 2023

Via Certified Mail 7022 2410 0002 1825 3272
Return Receipt Requested

Oxy Y-1 Co
5 Greenway Plz Ste 110
Houston, TX 77046-0521

To all Interest Owners:

Enclosed for your review is a copy of Mack Energy Corporation's application for a Devonian SWD well. Produced water will be injected at a proposed depth of 10,985-11,525'. The Labrador SWD #1Y located 1978 FSL & 1930 FEL, Sec. 23 T15S R29E, Chaves County.

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Sincerely,

Mack Energy Corporation

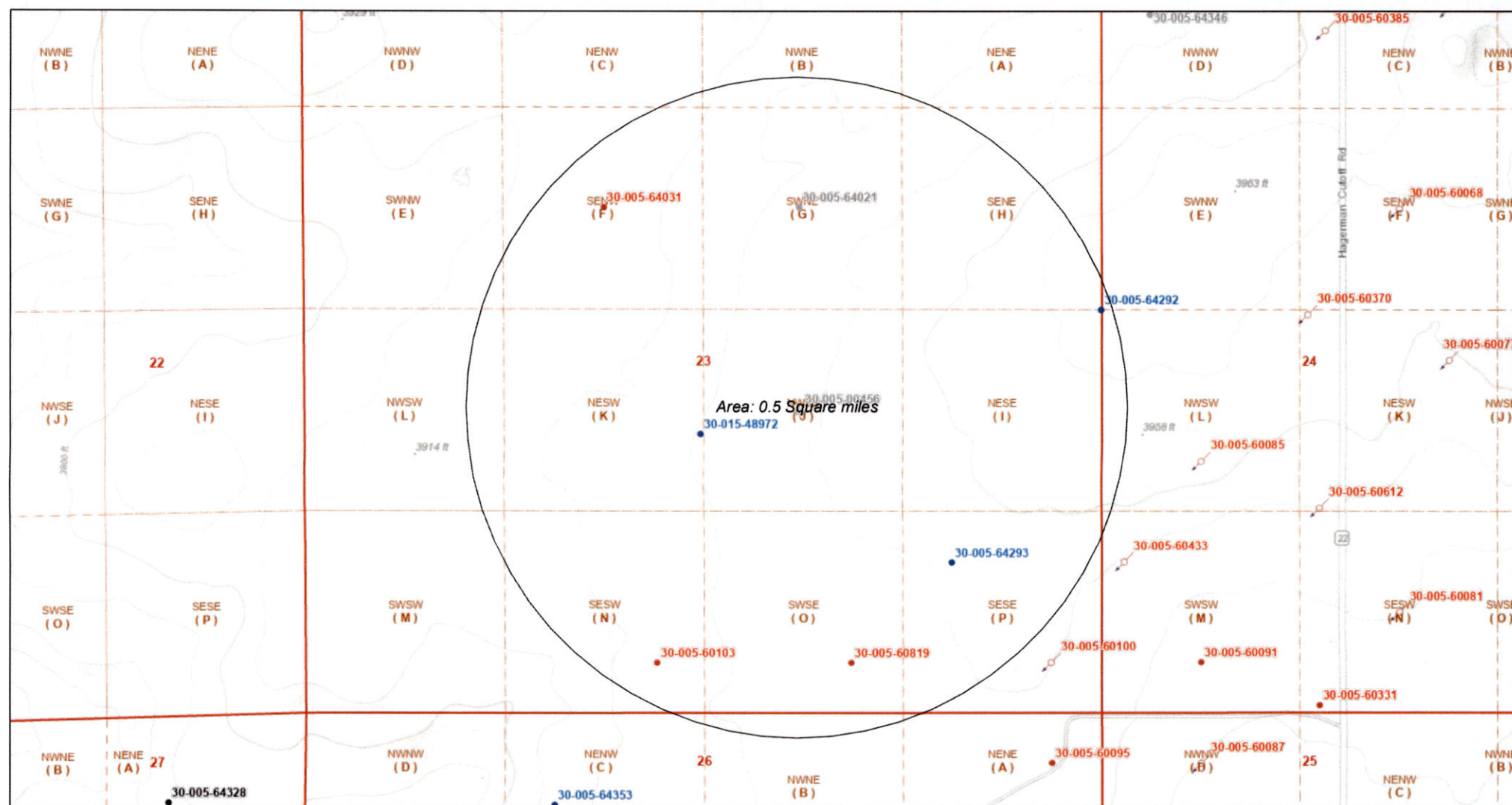
A handwritten signature in blue ink that reads "Deana Weaver".

Deana Weaver
Regulatory Technician II

DW/

Attachments

OCD Well Locations




5/12/2022, 11:46:50 AM

☐ Override 1

Wells - Large Scale

⚙ Gas, Cancelled

 Injection, Plugged

- Oil, Active

- Oil, Cancelled

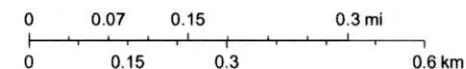
Oil, New

- Oil, Plugged

PLSS Second Division

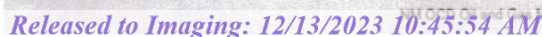
PLSS First Division

1:9,028

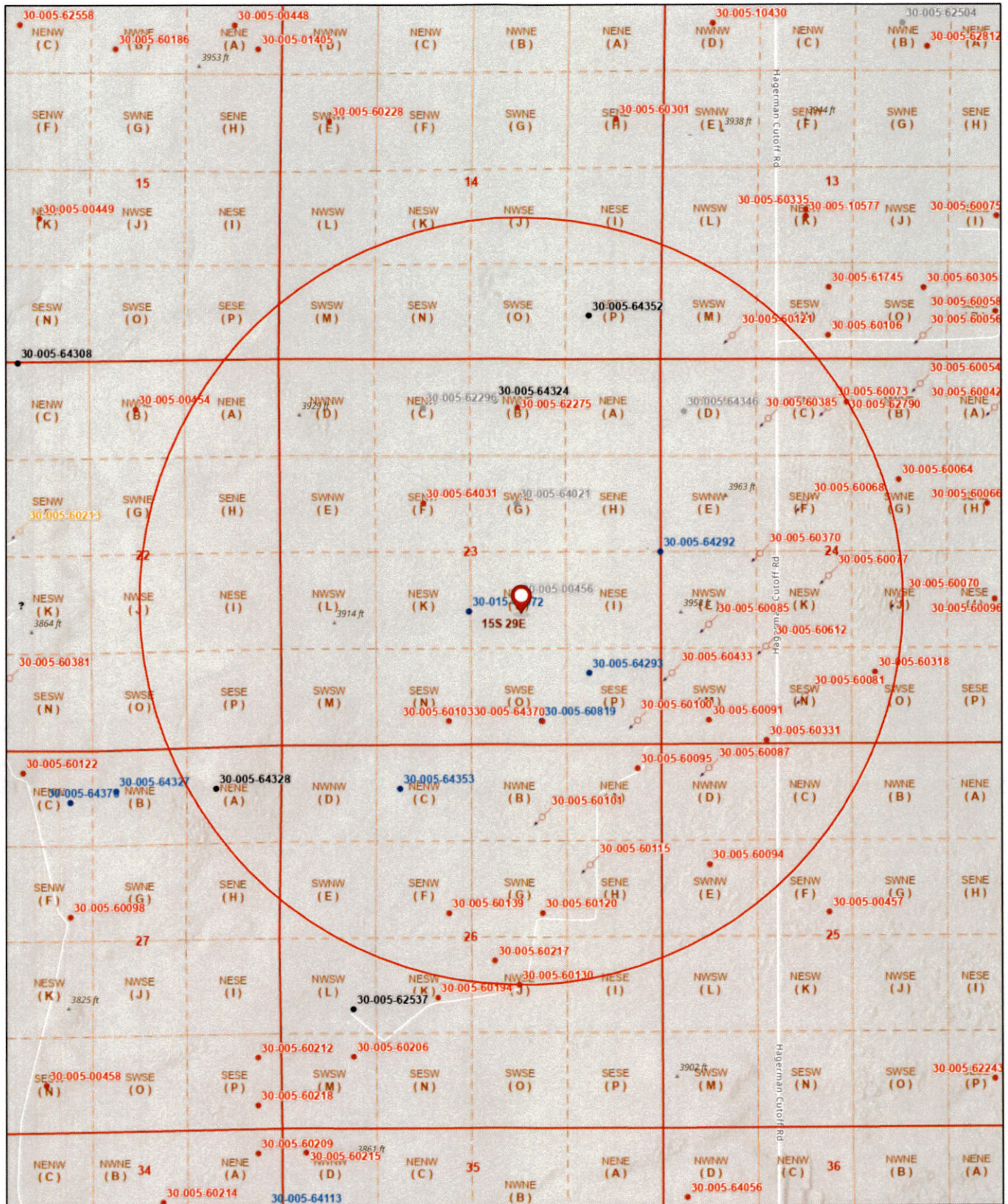


Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the

NM OCD Oil and Gas Map. <http://nm-ernrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75>; New Mexico Oil Conservation Division



OCD Well Locations



10/16/2023, 8:38:18 AM

Wells - Large Scale

Gas, Cancelled

Injection, Plugged

Injection, Temporarily Abandoned

Oil, Active

Oil, Cancelled

Oil, New

Oil, Plugged

undefined

PLSS Second Division

PLSS First Division

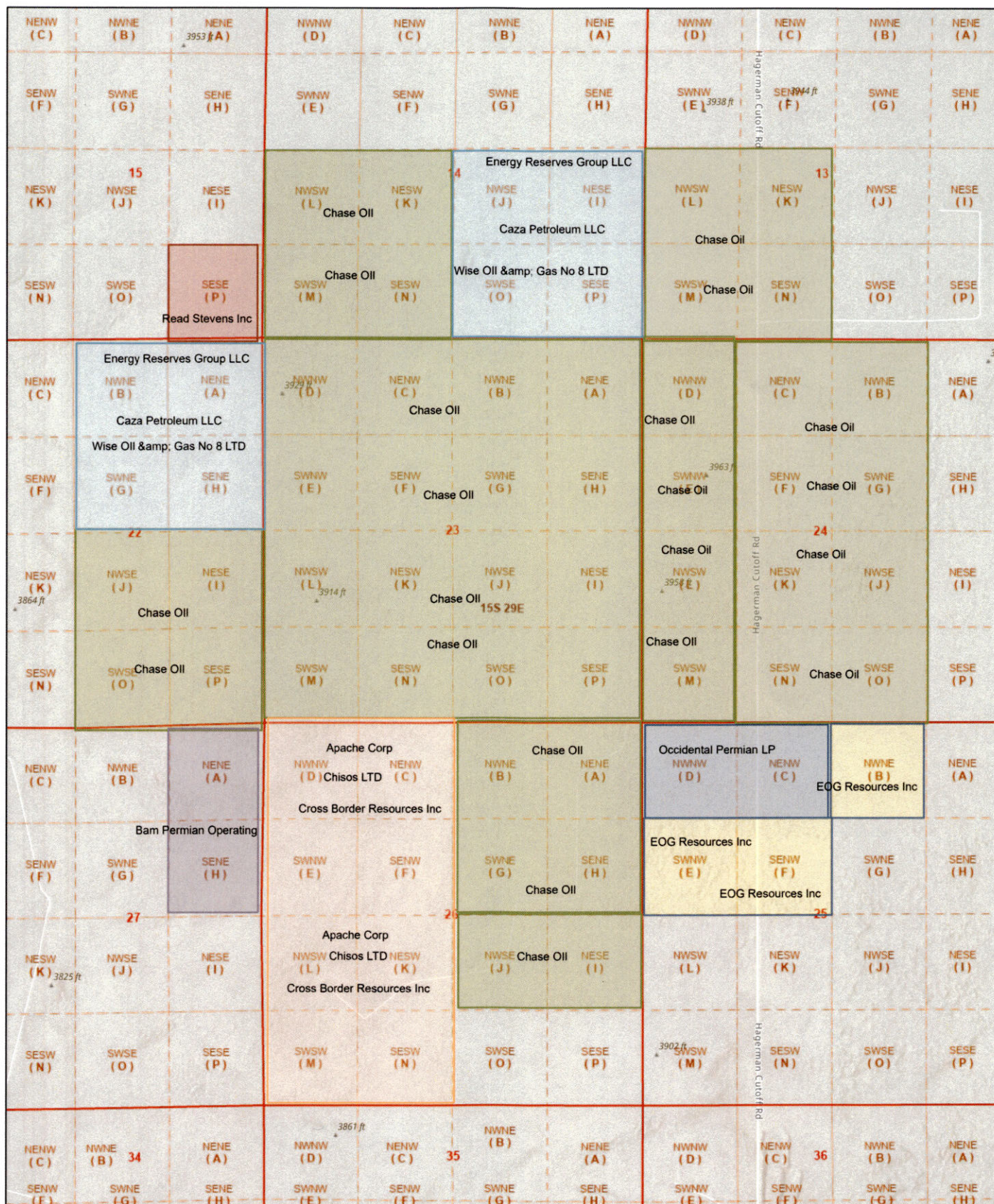
PLSS Townships

1:18,056

0 0.17 0.35 0.7 mi
0 0.28 0.55 1.1 km

Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA,

New Mexico Oil Conservation Division



10/16/2023, 9:37:56 AM

Areas

- Override 1
- Override 2
- Override 3
- Override 4
- Override 5
- Override 6
- Override 7
- Override 8
- PLSS Second Division
- PLSS First Division
- PLSS Townships

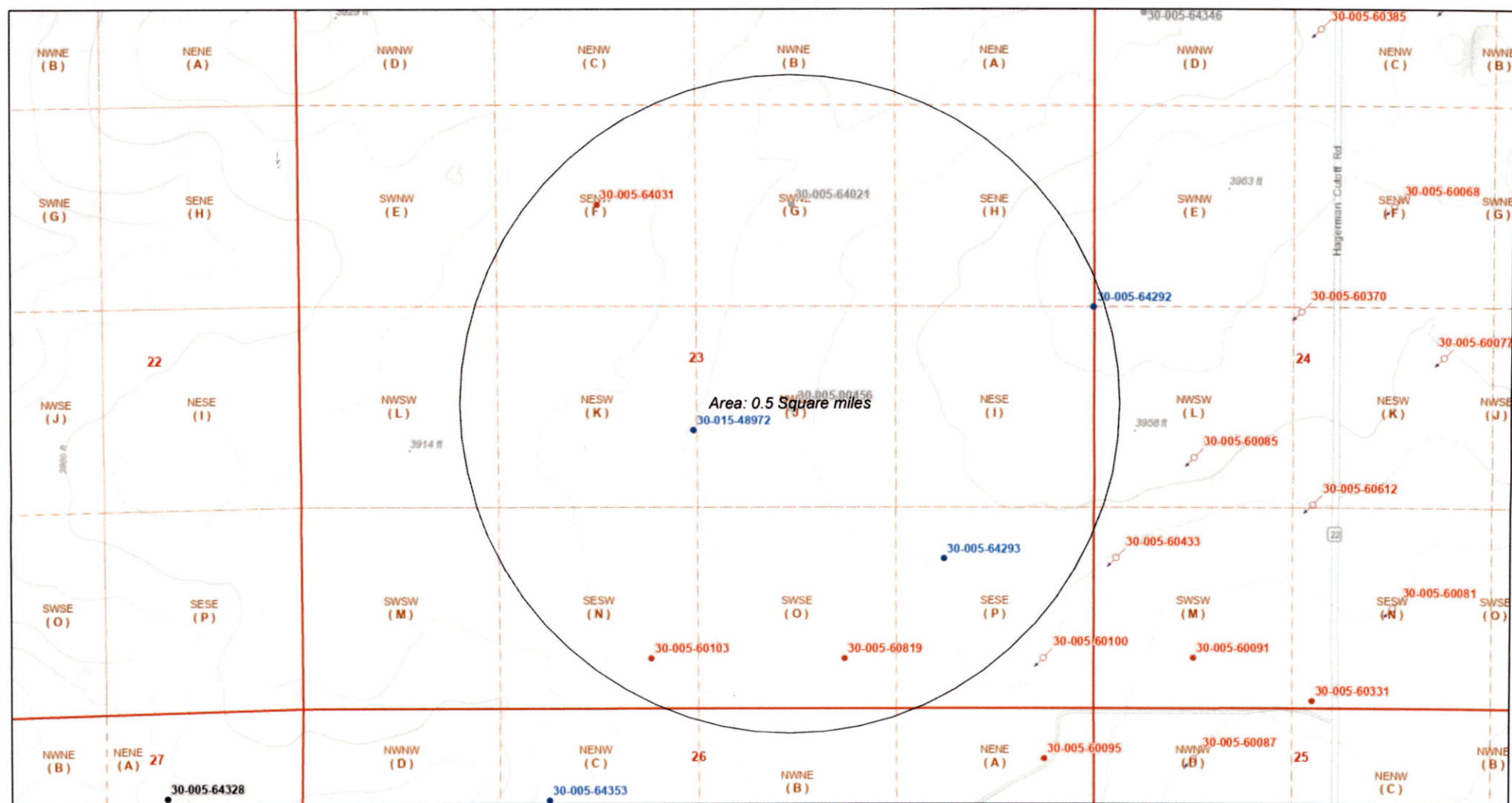
1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA,

OCD Well Locations



5/12/2022, 11:46:50 AM

 Override 1
  Oil, Active
  Oil, Plugged

Wells - Large Scale
  Oil, Cancelled
  PLSS Second Division

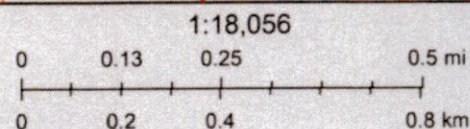
 Gas, Cancelled
  Oil, New
  PLSS First Division

 Injection, Plugged

1:9,028

Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the

NM OCD Oil and Gas Map. <http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75>; New Mexico Oil Conservation Division



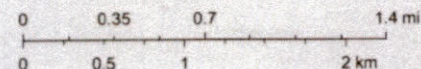
OCD Well Locations



3/15/2022, 11:21:36 AM

1:36,112

- Override 1
 Wells - Large Scale
 † undefined
 * Miscellaneous
 * CO2, Active
 * CO2, Cancelled
 * CO2, New
 * CO2, Plugged
 * CO2, Temporarily Abandoned
 * Gas, Active
 * Gas, Cancelled
 * Gas, New
 * Gas, Plugged
 * Gas, Temporarily Abandoned
 * Injection, Active
 * Injection, Cancelled
 * Injection, New
 * Injection, Plugged
 * Injection, Temporarily Abandoned
 * Oil, Active
 * Oil, Cancelled
 * Oil, New
 * Oil, Plugged
 * Oil, Temporarily Abandoned
 * Salt Water Injection, Active
 * Salt Water Injection, Cancelled
 * Salt Water Injection, New
 * Salt Water Injection, Plugged
 * Salt Water Injection, Temporarily Abandoned
 * Water, Active
 * Water, Cancelled
 * Water, New
 * Water, Plugged
 * Water, Temporarily Abandoned
- OCD Districts
 OCD District Offices
 PLSS First Division
 PLSS Townships



Esri, HERE, Garmin, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department, OCD, Maxar, BLM

Labrador SWD #1Y
C-108
Well Tabulation Penetrating Injection Zone in Review Area
Mack Energy Corporation
Proposed Disposal Well

Operator	Well Name	API #	County	Footage	Sec	TWN	RNG	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval	Casing Prog	Cement
Mack Energy Corporation	Labrador SWD #1Y	30-005-64374	Chaves	1978 FSL 1930 FEL	23	15S	29E	SWD	Not Drilled								
Mack Energy Corporation	Labrador SWD #1	30-005-64374	Chaves	1980 FNL 1980 FWL	23	15S	29E	Oil (Dry Hole)	P&A	12/26/2008	3/18/2009	1900'	1900'	Unders Sulimar, Queen		13 3/8" @ 40' 8 5/8" @ 370'	350sx
									3/18/2009								
Mack Energy Corporation	Sarilyn Federal #1	30-005-64370	Chaves	330 FSL 1650 FEL	23	15S	29E	Oil (Dry Hole)	P&A 12/10/2022	12/8/2022	12/10/2022	4018'		San Andres		8 5/8" @ 423'	200sx
									35sx @ 4018'								
									45sx 3993'								
									50sx @ 3967'								
									70sx @ 3923'								
									60sx @ 1250'								
									37sx @ 503'								
									104 @ 92-Surface Circ 42sx								
Jack L. McClellan	Getty Federal #1	30-005-60103	Chaves	330 FSL 2310 FWL	23	15S	29E	Oil (Dry Hole)	P&A 12/28/1969	11/23/1969	12/23/1969	1915	1915	Undesignated		8 5/8" @ 387'	50sx
									Plug @ 1815-1915								
									Plug @ 965-1065'								
									Plug @ 328-428'								
									Plug @ 175 to Surface								
Mack Energy Corporation	Powell River Federal Com #1H	30-005-64352	Chaves	602 FSL 990 FEL	14	15S	29E	Oil Well	Producing	7/20/2021	6/28/2021	9025'/3501'TVD	8976'/3501'TVD	San Andres	3497-3501' TVD	13 3/8" @ 252' 9 5/8" @ 1230' 7" & 5 1/2" @ 9025'	417sx 848sx 1240sx
NM Institute of Mining & Tech	Sulimar Queen Unit #9	30-005-60121	Chaves	330 FSL 990 FWL	13	15S	29E	Oil Well	P&A 2/20/2006	4/24/1970	5/15/1970	1995'	1992'	Queen	1958-1970'	8 5/8" @ 317' 5 1/2" @ 1992'	100sx 150sx
									25sx @ 1715-1921'								
									Perf @ 1193'								
									40sx @ 848-1243'								
									Pull 406' 5 1/2" Csg								
									60sx @ 237-465'								
									20sx @ 60' to Surface								
Mack Energy Corporation	Maple Ridge Federal #1H	30-005-64324	Chaves	565 FNL 2285 FEL	23	15S	29E	Oil Well	Producing	3/18/2019	7/12/2019	8940'/3424' TVD	8912'/3424'TVD	San Andres	3794-8824'	13 3/8" @ 352' 9 5/8" @ 1206' 7" @ 3505' 5 1/2" @ 3505-8940'	350sx 405sx 315sx 1400sx
Pre-Ongard Well Operator	Pre-Ongard Well #1	30-005-62275	Chaves	660 FNL 1980 FEL	23	15S	29E	Oil Well Dry Hole	P&A 1/22/1986	6/26/1985	9/4/1985	3800'	3800'	San Andres	3391-3489'	8 5/8" @ 410' 4 1/2" @ 3800'	250sx 850sx
									35sx @ 3500'								
									25sx @ 1600-1950'								
									25sx @ 300-500'								
									50sx 350'								
									10sx to surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #12	30-005-60385	Chaves	810 FNL 1490 FWL	24	15S	29E	Injection	P&A 2/15/2006	6/17/1976	8/1/1976	2012'	2000'	Queen	1960-1970'	8 5/8" @ 380' 5 1/2" @ 2010'	100sx 150sx
									25sx @ 1675-1921'								
									Perf @ 1277'								
									25sx @ 1093-1323'								
									Pull 475' 5 1/2" csg								
									60sx @ 328-535'								
									20sx @ 60' to Surface								
EOG Y Resources Inc	Carthel BGT Federal #3	30-005-64031	Chaves	1980 FNL 1980 FWL	23	15S	29E	Oil Well	P&A 3/18/2009	12/26/2008	3/18/2009	1900'	1900'	Queen		13 3/8" @ 40' 8 5/8" @ 370' 7 7/8" hole @ 370-1900' openhole	350sx
									80sx @ 1524'								
									40sx @ 300'								
									Surface Plug								
NM Institute of Mining & Tech	Sulimar Queen Unit #2	30-005-60068	Chaves	1980 FNL 1980 FWL	24	15S	29E	Injection	P&A 3/28/2006	3/10/1969	4/5/1969	2008'	2004'	Queen	1968-1982'	8 5/8" @ 390' 5 1/2" @ 2005'	50sx 150sx
									25sx @ 1950'								
									25sx @ 1874-1950'								
									25sx @ 1798-1874'								
									Perf @ 1270'								
									Squ 80sx @ 972-1270'								
									Pull 467' 5 1/2" Csg								
									60sx @ 332-512								
									Perf @ 258'								
									35sx @ 211-315'								
									60sx @ 22-189'								
									10sx @ 22' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #11	30-005-60370	Chaves	2615 FSL 1370 FWL	24	15S	29E	Injection	P&A 3/24/1986	2/2/1976	3/1/1976	2015'	2009'	Queen	1970-1980'	8 5/8" @ 387' 5 1/2" @ 2014'	200sx 150sx
									30sx @ 1980'								
									25sx @ 450'								
									Circ cmt @ 60' to surface								
									50sx between 5 1/2" & 8 5/8" csg								
NM Institute of Mining & Tech	Sulimar Queen Unit #4	30-005-60077	Chaves	2410 FSL 2310 FWL	24	15S	29E	Injection	P&A 4/17/2006	6/13/1969	7/2/1969	2012'	2005'	Sulimar	1975-1988'	8 5/8" @ 383'	50sx

									25sx @ 1828-1922'							5 1/2" @ 2012'	150sx
									Perf @ 1290'								
									40sx @ 976-1354'								
									Pull 431' of 5 1/2" csg								
									60sx @ 283-478'								
									Perf @ 230'								
									30sx @ 150-264'								
									Perf @ 90'								
									SQU 100sx @ 3-90'								
									2sx @ 2' to surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #6	30-005-60085	Chaves	1650 FSL 660 FWL	24	15S	29E	Oil Well	P&A 5/4/2006	8/6/1969	8/27/1969	2003'	1999'	Queen	1967-1975'	8 5/8" @ 390'	50sx
									50sx @ 1953'							5 1/2" @ 2003'	150sx
									65sx @ 1953'								
									25sx @ 1649-1890'								
									Perfs @ 1276'								
									45sx @ 955-1323'								
									Pull 424' of 5 1/2" csg								
									60sx @ 257-535'								
									20sx @ 60' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #14	30-005-60612	Chaves	1345 FSL 1450 FWL	24	15S	29E	Injection	P&A 4/28/2006	2/23/1980	3/7/1980	2010'	2001'	Queen	1970-1978'	8 5/8" @ 406'	230sx
									25sx @ 1780-1953'							4 1/2" @ 2010'	200sx
									Perfs @ 1276'								
									30sx @ 896-1323'								
									Pull 397' of 4 1/2" Csg								
									75sx @ 270-535'								
									20sx @ 60' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #6	30-005-60318	Chaves	990 FSL 2310 FEL	24	15S	29E	Oil Well	P&A 6/6/2006	10/5/1974	11/12/1974	2024'	2005'	Queen	1988-1994'	10 3/4" @ 30'	1 1/2 yds Circ
									25sx @ 460-690'							5 1/2" @ 2023'	150sx
									Holes in casing @ 220-250'								
									SQZ 160sx @ 220' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #5	30-005-60081	Chaves	660 FSL 1980 FWL	24	15S	29E	Injection	P&A 4/24/2006	7/6/1969	7/26/1969	2020'	2015'	Queen	1976-1988'	8 5/8" @ 383'	50sx
									25sx @ 1938-1984'						2004-2006'	5 1/2" @ 2016'	150sx
									20sx @ 1738-1938'								
									Perfs @ 1280'								
									45sx @ 1221-1323'								
									Pull 336' of 5 1/2" Csg								
									50sx @ 380-504'								
									30sx @ 376-380'								
									Perfs @ 90' SQZ 100sx 3-90'								
									2sx @ 3' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #13	30-005-60433	Chaves	990 FSL 150 FWL	24	15S	29E	Injection	P&A 5/9/2006	6/28/1977	8/5/1977	1975'	1973'	Queen	1955-1957'	8 5/8" @ 388'	100sx Circ
									25sx @ 1710-1890'							5 1/2" @ 1975'	150sx
									Perfs @ 1260								
									40sx @ 969-1323'								
									Perfs @ 420'								
									Pull 353' of 5 1/2" Csg								
									40sx @ 262-472'								
									20sx @ 60' to Surface								
Pre-Ongard Well Operator	Pre-Ongard Well #10	30-005-60331	Chaves	50 FSL 1450 FWL	24	15S	29E	Oil Well	P&A 7/21/1992	1/29/1975	2/16/1975	2025'		Queen		10 3/4" @ 30'	1 1/2 yards
NM Institute of Mining & Tech	Sulimar Queen Unit #10								35sx @ 1780-2010'							5 1/2" @ 2025'	150sx
									35sx @ 910-1112'								
									Perf @ 400'								
									35sx @ 200-400'								
									Plug @ 60' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #7	30-005-60091	Chaves	330 FSL 660 FWL	24	15S	29E	Oil Well	P&A 5/11/2006	9/14/1969	10/5/1969	1999'	1987'	Queen	1960-1967'	8 5/8" @ 382'	50sx
									25sx @ 1653-1890'							5 1/2" @ 1999'	150sx
									Perfs @ 1270'								
									40sx 942-1323'								
									Perfs @ 330'								
									SQZ 87sx @ 330' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #2	30-005-60100	Chaves	330 FSL 330 FEL	23	15S	29E	Injection	P&A 3/24/1986	11/14/1969	12/18/1969	1994'	1991'	Queen	1954-1964'	8 5/8" @ 364'	50sx
									30sx @ 1820-1970'							5 1/2" @ 1992'	150sx
									25sx @ 950-1050'								
									25sx @ 320-420'								
									15sx @ 60' to Surface								
									50sx between 8 5/8" & 5 1/2"								
Mack Energy Corporation	Grand Forks Federal Com #2H	30-005-64328	Chaves	565 FNL 900 FEL	27	15S	29E	Oil Well	Producing	2/16/2019	3/29/2019	9012' 3422'TVD	8978' 3442' TVD	San Andres	3819-8920'	13 3/8" @ 303'	1020sx
																9 5/8" @ 1193'	410sx
																7" @ 3542'	
																5 1/2" @ 3542-9005'	1820sx
NM Institute of Mining & Tech	Sulimar Queen Unit #1	30-005-60095	Chaves	330 FNL 330 FEL	26	15S	29E	Oil Well	P&A 5/18/2006	10/17/1969	11/4/1969	2006'	1989'	Queen	1962-1972'	8 5/8" @ 392'	150sx
									25sx @ 1733-1984'							4 1/2" @ 2006'	150sx
									Perfs @ 1233								
									30sx @ 874-1290'								
									Perfs @ 437'								

									Pull 338' of 4 1/2" Csg								
									40sx @ 251-480'								
									25sx @ 60' to surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #1	30-005-60087	Chaves	330 FNL 660 FWL	25	15S	29E	Injection	P&A 5/16/2006	8/25/1969	9/14/1969	1995'	1980'	Queen	1958-1970'	8 5/8" @ 385'	50sx
									25sx @ 1850-1953'							4 1/2" @ 1996'	150sx
									Holes @ 1764-1850'								
									25sx @ 1649-1827'								
									Perfs @ 1254'								
									30sx @ 900-1323'								
									Pull 435' of 4 1/2" Csg								
									55sx @ 330-441'								
									Holes in 8 5/8" csg 150'+-								
									SQZ 95sx @ 14-150'								
									5sx @ 14' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #2	30-005-60101	Chaves	990 FNL 1650 FEL	26	15S	29E	Injection	P&A 5/23/2006	11/26/1969	1/2/1970	1986'	1962'	Queen	1940-1952'	8 5/8" @ 405'	75sx
									75sx @ 1531-1890'							4 1/2" @ 1980'	150sx
									Pull 1219' of 4 1/2" csg								
									55sx @ 838-1260'								
									40sx @ 348-472'								
									30sx @ 90' to Surface								
Pre-Ongard Well Operator	Pre-Ongard Well #2	30-005-60094	Chaves	1650 FNL 660 FWL	25	15S	29E	Dry	P&A 10/23/1969	10/4/1969	10/23/1969	2014'		Queen		8 5/8" @ 381	50sx
Pan American Petroleum Corp	LaRue Federal #2								50sx @ 1837-2014								
									20sx @ 1020-1090'								
									30sx @ 381'								
									10sx to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #1	30-005-60115	Chaves	1650 FNL 990 FEL	26	15S	29E	Oil Well	P&A 05/26/2006	3/17/1970	4/5/1970	2005'	1994'	Queen	1973-1982'	8 5/8" @ 425'	175sx
									50sx @ 1842-1984'							5 1/2" @ 2004'	135sx
									Perfs @ 1250'								
									45sx 935-1323'								
									Pull 456' of 5 1/2" csg								
									50sx @ 368-504'								
									20sx @ 60' to Surface								
Pre-Ongard Well Operator	Pre-Ongard Well #1	30-005-60139	Chaves	2310 FNL 2310 FWL	26	15S	29E	Dry	P&A 10/8/1970	9/18/1970	10/8/1970	2113'		Queen		8 5/8" @ 411'	275sx
									28sx @ 1850-1950'								
									28sx @ 1135-1035'								
									28sx @ 364-465'								
									10sx @ Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #2	30-005-60120	Chaves	2310 FNL 1650 FEL	26	15S	29E	Oil Well	P&A 6/02/2006	5/17/1970	6/17/1970	1991'	1975'	Queen	1954-1963'	8 5/8" @ 421	175sx
									25sx @ 1732-1890'							5 1/2" @ 1985'	130sx
									Perf @ 1255'								
									50sx @ 651-1260'								
									Pull 433' of 5 1/2" csg								
									55sx @ 426-505'								
									30sx @ 238-413'								
									20sx @ 60' to Surface								
NM Institute of Mining & Tech	Sulimar Queen Unit #3	30-005-60217	Chaves	2310 FSL 2310 FEL	26	15S	29E	Oil Well	P&A 5/31/2006	6/4/1972	7/7/1972	1975'	1974'	Queen	1938-1948'	8 5/8" @ 250'	100sx
									25sx @ 1539-1858'							4 1/2" @ 1975'	150sx
									Perfs @ 1238'								
									30sx @ 854-1291'								
									Pull 320' of 4 1/2" Csg								
									55sx @ 238-378'								
									67sx @ 238' to Surface								
Pre-Ongard Well Operator	Pre-Ongard Well #3	30-005-60130	Chaves	1980 FSL 1980 FEL	26	15S	29E	Dry	P&A 7/27/1970	6/29/1970	7/16/1970	1997'		Queen		8 5/8" @ 421'	175sx
Cities Service Oil Company	Snyder Federal #3								35sx @ 1885-1995'								
									35sx @ 1150-1260'								
									35sx @ 375-430'								
									10sx @ 30' to Surface								

Labrador SWD #1Y						
Operator: Mack Energy Corporation						
Location: Sec. 23 T15S R29E						
1978 FSL 1930 FEL						
Objective: Devonian						
GL Elevation: 3937.8'						
Depth	Hole Size & Cement					Casing Detail
450'	17 1/2" hole 575sx Class C Circ to Surface					13 3/8" 48#, H-40 ST&C 450'
2,900'	12 1/4" hole 925sx Class C Circ to Surface					9 5/8" 36#, J-55, ST&C 2900'
11,525	8 3/4" hole 1,400sx 50/50 Circ to Surface					7" 26#, HPC-110, LT&C 0-10985'
						3 1/2" tubing 0-10,885' Arrow Set 10K (7"x3 1/2") Nickel Plated Packer with a 2.81" Profile Nipple 10,885'
TD- 11,525'						

P&A 3/18/2009		Labrador SWD #1 30-005-64374				
		Operator: Mack Energy Corporation				
		Location: Sec. 23 T15S R29E				
		1978 FSL 1980 FEL				
		Objective:				
		GL Elevation: 3937.4'				
Depth	Hole Size & Cement					Casing Detail
472'	17 1/2" hole 13 3/8" Set in 9/9/61 400sx CMT Circ to Surface					Plug @ Surface w/ 10sx CMT Plug @ 500-400' w/ 30sx CMT
2888'	12 1/4" hole 9 5/8" Set in 9/16/61 1000sx CMT TOC @ 354'					
						Perf 1919-1936" CIBP 1972 w/ 2sx CMT
			XXXXXXXXXXXXXXXXXXXX			Plug @ 1893-1993
12,166'	8 3/4" hole					Plug @ 2838-2938' w/35sx cmt
						Plug @ 3995-4095 w/ 30sx cmt
						Plug @ 6105-6205' w/ 30sx cmt
						Plug @ 7445-7545 w/ 30sx cmt
						Plug @ 8400-8600' w/ 30sx cmt
						Plug @ 9639-9739' w/ 30sx cmt
						Plug @ 10150-10250' w/ 30sx cmt
						Plug @ 10935-11035' w/ 30sx cmt
						Plug @ 11742-11842' w/ 30sx cmt
					</	

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P&A 12/28/1989		Getty Federal #1 30-005-60103	
		Operator: Jack L. McClellan Location: Sec. 23 T15S R29E 330 FSL 2310 FWL Objective: Undesignated GL Elevation: 3920'	
Depth	Hole Size & Cement		Casing Detail
387'	12 1/4" Hole 8 5/8" 50sx TOC @ 143'		Plug @ 175' to Surface
1915'	8" Hole		
			Plug @ 328-428'
			Plug @ 965-1065'
			Plug @ 1815-1915'
		TD- 1915'	

P&A 2/20/2006		Sulimar Queen Unit #9 30-005-60121	
		Operator: NM Institute of Mining and Tech Location: Sec. 13 T15S R29E 330 FSL 990 FWL Objective: Queen GL Elevation: 3938'	
Depth	Hole Size & Cement	Casing Detail	
317'	10" Hole 8 5/8" 100sx CMT	20sx @ 60' to Surface	
1992'	8" Hole 5 1/2" 150sx	60sx @ 237'-465' Pull 406' 5 1/2" csg	
		40sx Plug @ 848-1243' Perf @ 1193' 25sx Plug @ 1715-1921'	
		Perfs @ 1958-1970'	
		TD- 1995'	

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P&A 2/15/2006		Sulimar Queen Unit #12 API # 30-005-60385		
		Operator: NM Institute of Mining & Tech Location: Sec. 24 T15S R29E 810 FNL 1490 FWL Objective: Queen GL Elevation: 3930'		
Depth	Hole Size & Cement	Casing Detail		
380'	10 1/4" Hole 8 5/8" 100sx CMT	20sx @ 60' to Surface		
2010'	8" Hole 5 1/2" 150sx	60sx @ 328-535' Pull 475' 5 1/2" csg		
		25sx @ 1093-1323' Perfs @ 1277'		
		25sx @ 1675-1921' Perfs 1960-1970'		
	TD- 2012'			

P&A 3/18/2009		Carthel BGT Federal #3 API # 30-005-64031	
		Operator: EOG Y Resources Inc. Location: Sec. 23 T15S R29E 1980 FNL 1980 FWL Objective: Queen GL Elevation: 3930'	
Depth	Hole Size & Cement	Casing Detail	
40'	12 1/4" Hole 13 3/8"	Surface Plug	
370'	12 1/4" Hole 8 5/8" 350sx		
	7 7/8" Hole		
370-1900'	Open Hole	40sx @ 300'	
		80sx @ 1524"	
	TD- 1900'		

P&A 3/28/2006		Sulimar Queen Unit #2 API # 30-005-60068			
		Operator: NM Institute of Mining & Tech Location: Sec. 24 T15S R29E 1980 FNL 1980 FWL Objective: Queen GL Elevation: 3933'			
Depth	Hole Size & Cement	Casing Detail			
390'	12 3/4" Hole 8 5/8" 50sx CMT				10sx @ 22 to Surface 60sx @ 22'-189' 35sx @ 211-315' Perf @ 258'
2005'	8" Hole 5 1/2" 150sx				60sx @ 332-512' Pull 467' 5 1/2" csg
					Sqz 80sx @ 972-1270' Perfs @ 1270' 25sx @ 1798-1874' 25sx @ 1874-1950' 25sx @ 1950' Perfs 1968-1982'
TD- 2008'					

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P&A 5/4/2006		Sulimar Queen Unit #6 API # 30-005-60085			
		Operator: NM Institute of Mining & Tech			
		Location: Sec. 24 T15S R29E			
		1650 FSL 660 FWL			
		Objective: Queen			
		GL Elevation: 3948'			
Depth	Hole Size & Cement	Casing Detail			
		20sx @ 60' to Surface			
390'	10" Hole 8 5/8" 50sx Cmt				60sx @ 257-535'
2003'	8" Hole 5 1/2" 150sx				Pull 424' of 5 1/2" csg
					45sx @ 955-1323' Perfs @ 1276'
					25sx @ 1649-1890"
					65sx @ 1953' 50sx @ 1953'
					Perfs 1967-1975"
	TD- 2003'				

P&A 4/28/2006		Sulimar Queen Unit #14 API # 30-005-60612			
		Operator: NM Institute of Mining & Tech			
		Location: Sec. 24 T15S R29E			
		1345 FSL 1450 FWL			
		Objective: Queen			
		GL Elevation: 3937'			
Depth	Hole Size & Cement	Casing Detail			
		20sx @ 60' to Surface			
406'	12" Hole 8 5/8" 230sx Cmt				75sx @ 270-535'
2010'	7 7/8" Hole 4 1/2" 200sx				Pull 397' of 4 1/2" csg
					30sx @ 896-1323' Perfs @ 1276'
					25sx @ 1780-1953' Perfs 1970-1978'
TD- 2010'					

P&A 6/6/2006		Sulimar Queen Unit #6 API # 30-005-60318		
		Operator: NM Institute of Mining & Tech		
		Location: Sec. 24 T15S R29E		
		990 FSL 2310 FEL		
		Objective: Queen		
		GL Elevation: 3929'		
Depth	Hole Size & Cement	Casing Detail		
30'	12 1/4" Hole 10 3/4" 1.5 yard	SQZ 160sx @ 220' to Surface		
2023'	8" Hole 5 1/2" 150sx	Holes in Csg @ 220-250'		
		25sx @ 460-690'		
TD- 2024'		Perfs 1988-1994'		

P&A 4/24/2006		Sulimar Queen Unit #5 API # 30-005-60081	
		Operator: NM Institute of Mining & Tech	
		Location: Sec. 24 T15S R29E	
		660 FSL 1980 FWL	
		Objective: Queen	
		GL Elevation: 3907'	
Depth	Hole Size & Cement	Casing Detail	
		2sx @ 3' to Surface	
383	12 1/4" Hole 8 5/8" 50sx Cmt		SQZ 100sx 3-90' Perfs @90'
			30sx @ 376-380' 50sx @ 380-504'
2016'	8" Hole 5 1/2" 150sx		Pull 336' of 5 1/2" csg
			45sx @ 1221-1323' Perfs @ 1280'
			20sx @ 1738-1938' 25sx @ 1938-1984' Perfs 1976-1988'
			Perfs 2004-2006'
	TD- 2020'		

P&A 5/9/2006		Sulimar Queen Unit #13 API # 30-005-60433			
		Operator: NM Institute of Mining & Tech Location: Sec. 24 T15S R29E 990 FSL 150 FWL Objective: Queen GL Elevation: 3925'			
Depth	Hole Size & Cement	Casing Detail			
		20sx @ 60' to Surface			
388	10 1/4" Hole 8 5/8" 100sx Cmt				40sx @ 262-472'
1975'	8" Hole 5 1/2" 150sx				Pull 353' of 5 1/2" csg Perfs @ 420'
					40sx @ 969-1323' Perfs @ 1260'
					20sx @ 1738-1938' 25sx @ 1710-1890'
					Perfs 1955-1957'
	TD- 1975'				

P&A 7/21/1992		Pre-Ongard Well #10 API # 30-005-60331		
		Operator: Pre-Ongard Well Operator		
		Location: Sec. 24 T15S R29E		
		50 FSL 1450 FWL		
		Objective: Queen		
		GL Elevation: 3922'		
Depth	Hole Size & Cement	Casing Detail		
		Plug @ 60' to Surface		
	12 1/4" Hole 10 3/4" 1.5 yards			
30'				
	8" Hole 5 1/2" 150sx			
2025'				
				35sx @ 200-400'
				Perfs @ 400'
				35sx @ 910-1112'
				35sx @ 1780-2010'
	TD- 2025"			

P&A 5/11/2006		Sulimar Queen Unit #7 API # 30-005-60091	
		Operator: NM Institute of Mining & Tech Location: Sec. 24 T15S R29E 330 FSL 660 FWL Objective: Queen GL Elevation: 3927'	
Depth	Hole Size & Cement	Casing Detail	
		SQZ 87sx @ 330' to Surface	
382'	10" Hole 8 5/8" 50 sx	Perfs @ 330'	
1999'	8" Hole 5 1/2" 150sx	40sx @ 942-1323' Perfs @ 1270'	
		25sx @ 1653-1890'	
		Perfs @ 1960-1967'	
	TD-1999"		

P&A 3/24/1986		Sulimar Queen Unit #2 API # 30-005-60100	
		Operator: NM Institute of Mining & Tech	
		Location: Sec. 23 T15S R29E	
		330 FSL 330 FEL	
		Objective: Queen	
		GL Elevation: 3938'	
Depth	Hole Size & Cement	Casing Detail	
	12 1/2" Hole 8 5/8"	15sx @ 60' to Surface	
	50 sx	50sx between 8 5/8 & 5 1/2	
364'		25sx @ 320-420'	
	8" Hole 5 1/2"		
	150sx		
1992'		25sx @ 950-1050'	
		30sx @ 1820-1970'	
		Perfs @ 1954-1964'	
TD-1994'			

P&A 5/18/2006		Sulimar Queen Unit #1 API # 30-005-60095		
		Operator: NM Institute of Mining & Tech Location: Sec. 26 T15S R29E 330 FNL 330 FEL Objective: Queen GL Elevation: 3935'		
Depth	Hole Size & Cement	Casing Detail		
	11" Hole 8 5/8"			25sx @ 60' to Surface
	150sx			40sx @ 251-480'
392'				Pull 338' of 4 1/2" csg Perfs @ 437'
	6 3/4" Hole 4 1/2"			
	150sx			
2006'				30sx @ 874-1290'
				Perfs @ 1233'
				25sx @ 1733-1984'
				Perfs @ 1962-1972'
	2006'			

P&A 5/16/2006		Sulimar Queen Unit #1 API # 30-005-60087			
		Operator: NM Institute of Mining & Tech Location: Sec. 25 T15S R29E 330 FNL 660 FWL Objective: Queen GL Elevation: 3919'			
Depth	Hole Size & Cement	Casing Detail			
385'	12" Hole 8 5/8" 50sx	####		####	5sx @ 14' to Surface SQZ 95sx @ 14-150' Holes in 8 5/8" csg 150+- 55sx @ 330-441' Pull 435' of 4 1/2" csg
1996'	7 7/8" Hole 4 1/2" 150sx				
					30sx @ 900-1323'
					Perfs @ 1254'
		####		#####	25sx @ 1649-1827 Holes @ 1764-1850' 25sx @ 1850-1953'
					Perfs @ 1958-1970'
	TD-1996'				

P&A 5/23/2006		Sulimar Queen Unit #2 API # 30-005-60101			
		Operator: NM Institute of Mining & Tech			
		Location: Sec. 26 T15S R29E			
		990 FNL 1650 FEL			
		Objective: Queen			
		GL Elevation: 3935'			
Depth	Hole Size & Cement	Casing Detail			
	12" Hole 8 5/8"				30sx @ 90' to Surface
405'	75sx				40sx @ 348-472' Pull 1219' of 4 1/2" csg 55sx @ 838-1260'
	6 3/4" Hole 4 1/2"				
1980'	150sx				
					75sx @ 1531-1890'
					Perfs @ 1940-1952'
	TD-1986"				

P&A 10/23/1989		Per-Ongard Well #2 API # 30-005-60094	
		Operator: NM Institute of Mining & Tech Location: Sec. 25 T15S R29E 1650 FNL 660 FWL Objective: Queen GL Elevation: 3909'	
Depth	Hole Size & Cement	Casing Detail	
	12 1/4" Hole 8 5/8"		10sx. to Surface
381'	50sx		
	8 1/4" Hole		30sx @ 381'
2014'	150sx		
			20sx 1020-1090'
			50sx @ 1837-2014'
TD-2014"			

P&A 5/16/2006		Sulimar Queen Unit #1 API # 30-005-60115			
		Operator: NM Institute of Mining & Tech			
		Location: Sec. 26 T15S R29E			
		1650 FNL 9900 FEL			
		Objective: Queen			
		GL Elevation: 3926'			
Depth	Hole Size & Cement	Casing Detail			
	11 1/4" Hole 8 5/8"				20sx @ 60' to Surface
	175sx				50sx @ 368-504'
425'					Pull 456' of 5 1/2" csg
	7 7/8" Hole 5 1/2"				
	135sx				
2004					
					45sx @ 935-1323'
					Perfs @ 1250'
					50sx @ 1842-1984'
					Perfs @ 1973-1982'
	TD-2005"				

P&A 10/8/1970		Per-Ongard Well #1 API # 30-005-60139	
		Operator: Pre-Ongard Well Operator	
		Location: Sec. 26 T15S R29E	
		2310 FNL 2310 FWL	
		Objective: Queen	
		GL Elevation: 3905'	
Depth	Hole Size & Cement	Casing Detail	
	12 1/4" Hole 8 5/8"		10sx to Surface
411'	275sx		28sx @ 364-465'
2014'			
			28sx 1035-1135'
			28sx @ 1850-1950'
	TD-2113"		

P&A 6/02/2006		Sulimar Queen Unit #2 API # 30-005-60120		
		Operator: NM Institute of Mining & Tech Location: Sec. 26 T15S R29E 2310 FNL 1650 FEL Objective: Queen GL Elevation: 3915'		
Depth	Hole Size & Cement	Casing Detail		
421'	12 1/2" Hole 8 5/8" 175sx	20sx @ 60' to Surface 30sx @ 238-413' Pull 433' of 5 1/2" csg 55sx @ 426-505'		
1985'	8" Hole 5 1/2" 130sx			
		50sx @ 651-1260' Perfs @ 1255'		
		25sx @ 1732-1890'		
		Perfs @ 1954-1963'		
TD-1991'				

P&A 5/31/2006		Sulimar Queen Unit #3 API # 30-005-60217		
		Operator: NM Institute of Mining & Tech		
		Location: Sec. 26 T15S R29E		
		2310 FSL 2310 FEL		
		Objective: Queen		
		GL Elevation: 3926'		
Depth	Hole Size & Cement	Casing Detail		
	11" Hole 8 5/8"	67sx @ 238' to Surface		
	100sx			
250'				
	8" Hole 4 1/2"	Pull 320' of 4 1/2" csg		
	150sx	55sx @ 238-378'		
1975'				
		30sx @ 854-1291'		
		Perfs @ 1238'		
		25sx @ 1539-1858'		
		Perfs @ 1938-1948'		
	TD-1975'			

P&A 7/27/1970		Pre-Ongard Well #3 API # 30-005-60130	
		Operator: Pre-Ongard Well Operator	
		Location: Sec. 26 T15S R29E	
		1980 FSL 1980 FEL	
		Objective: Queen	
		GL Elevation: 2915'	
Depth	Hole Size & Cement	Casing Detail	
	12 1/2" Hole 8 5/8" 175sx		10sx 30' to Surface
421'			35sx @ 375-430'
1997'			
			35sx 1150-1260'
			35sx @ 1885-1995'
	TD-1997'		

OSE POD Locations Map



3/17/2022, 11:27:45 AM

- Override 1
- OSE District Boundary
- New Mexico State Trust Lands
 - Subsurface Estate
 - Both Estates
- SiteBoundaries

1:72,224

0 0.5 1 2 mi

0 1 2 4 km

Esri, HERE, Garmin, Esri, HERE, Earthstar Geographics, U.S. Department of Energy Office of Legacy Management

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New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

PLSS Search:

Section(s): 25

Township: 15S

Range: 29E

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Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
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PLSS Search:

Section(s): 26

Township: 15S

Range: 29E

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ACTIVE & INACTIVE POINTS OF DIVERSION



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer:	Mack Energy Corporation	Sample #:	118208
Area:	Artesia	Analysis ID #:	107555
Lease:	Montreal		
Location:	1H		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	2/13/2020	Chloride:	101615.8	Sodium:	62440.0
Analysis Date:	3/4/2020	Bicarbonate:	197.6	Magnesium:	965.3
Analyst:	Catalyst	Carbonate:		Calcium:	2569.0
TDS (mg/l or g/m3):	172020.9	Sulfate:	3400.0	Potassium:	660.8
Density (g/cm3):	1.116	Borate*:	110.4	Strontium:	57.8
		Phosphate*		Barium:	3.4
Hydrogen Sulfide:	7.4	*Calculated based on measured elemental boron and phosphorus.		Iron:	0.2
Carbon Dioxide:	102			Manganese:	0.550
Comments:				Conductivity (micro-mhos/cm):	199270
				Resistivity (ohm meter):	.0502
		pH at time of sampling:	7.14		
		pH at time of analysis:			
		pH used in Calculation:	7.14		
		Temperature @ lab conditions (F):	75		

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
°F										
80	0.58	8.60	-0.09	0.00	-0.08	0.00	-0.05	0.00	1.83	1.78
100	0.59	10.08	-0.16	0.00	-0.08	0.00	-0.08	0.00	1.63	1.78
120	0.60	11.86	-0.23	0.00	-0.07	0.00	-0.10	0.00	1.45	1.78
140	0.61	13.93	-0.28	0.00	-0.03	0.00	-0.10	0.00	1.30	1.78
160	0.63	16.01	-0.32	0.00	0.03	69.97	-0.10	0.00	1.16	1.78
180	0.65	18.38	-0.36	0.00	0.11	226.51	-0.10	0.00	1.05	1.78
200	0.68	21.05	-0.39	0.00	0.19	391.65	-0.09	0.00	0.95	1.48
220	0.73	24.01	-0.42	0.00	0.29	555.31	-0.08	0.00	0.87	1.48



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
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Fax: (432) 224-1038

Water Analysis Report

Customer:	Mack Energy Corporation	Sample #:	100487
Area:	Drilling	Analysis ID #:	94751
Lease:	Maple Ridge		
Location:	Fed #1		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	7/29/2019	Chloride:	84902.3	Sodium:	51250.0
Analysis Date:	8/8/2019	Bicarbonate:	241.6	Magnesium:	1177.0
Analyst:	Catalyst	Carbonate:		Calcium:	2566.0
TDS (mg/l or g/m3):	144232	Sulfate:	3300.0	Potassium:	564.2
Density (g/cm3):	1.097	Borate*:	173.9	Strontium:	53.5
		Phosphate*		Barium:	1.5
Hydrogen Sulfide:	14	*Calculated based on measured elemental boron and phosphorus.		Iron:	1.5
Carbon Dioxide:	162.8			Manganese:	0.460
Comments:				Conductivity (micro-mhos/cm):	194536
				Resistivity (ohm meter):	.0514
		pH at time of sampling:	6.41		
		pH at time of analysis:			
		pH used in Calculation:	6.41		
		Temperature @ lab conditions (F):	75		

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	-0.09	0.00	-0.09	0.00	-0.09	0.00	-0.04	0.00	1.52	0.91
100	0.01	0.30	-0.15	0.00	-0.08	0.00	-0.06	0.00	1.33	0.91
120	0.10	3.96	-0.20	0.00	-0.06	0.00	-0.08	0.00	1.15	0.61
140	0.21	8.22	-0.25	0.00	-0.01	0.00	-0.08	0.00	1.00	0.61
160	0.31	12.48	-0.28	0.00	0.06	131.82	-0.08	0.00	0.87	0.61
180	0.41	17.35	-0.31	0.00	0.14	299.86	-0.07	0.00	0.76	0.61
200	0.51	21.92	-0.33	0.00	0.24	471.86	-0.06	0.00	0.67	0.61
220	0.61	26.79	-0.35	0.00	0.35	637.46	-0.04	0.00	0.60	0.61



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer:	Mack Energy Corporation	Sample #:	55880
Area:	Artesia	Analysis ID #:	53988
Lease:	White Rock		
Location:	Federal #1H		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	12/21/2017	Chloride:	93901.4	Sodium:	58100.0
Analysis Date:	1/6/2018	Bicarbonate:	241.6	Magnesium:	969.6
Analyst:	Catalyst	Carbonate:		Calcium:	2737.0
TDS (mg/l or g/m3):	161820.5	Sulfate:	5000.0	Potassium:	571.6
Density (g/cm3):	1.107	Borate*:	229.5	Strontium:	66.0
		Phosphate*		Barium:	0.0
Hydrogen Sulfide:	11	*Calculated based on measured elemental boron and phosphorus.		Iron:	3.8
Carbon Dioxide:	242			Manganese:	0.000
Comments:				Conductivity (micro-ohms/cm):	176042
				Resistivity (ohm meter):	.0568
		pH at time of sampling:	6.9		
		pH at time of analysis:			
		pH used in Calculation:	6.9		
		Temperature @ lab conditions (F):	75		

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.43	9.88	0.10	359.72	0.11	305.55	0.18	14.96	0.00	0.00
100	0.49	12.27	0.03	111.03	0.10	296.88	0.16	13.17	0.00	0.00
120	0.55	14.96	-0.03	0.00	0.13	355.53	0.14	11.97	0.00	0.00
140	0.60	17.96	-0.08	0.00	0.17	467.16	0.13	11.67	0.00	0.00
160	0.64	20.95	-0.12	0.00	0.23	615.30	0.14	11.67	0.00	0.00
180	0.69	24.54	-0.15	0.00	0.31	784.69	0.14	12.27	0.00	0.00
200	0.75	28.13	-0.18	0.00	0.40	962.15	0.15	12.87	0.00	0.00
220	0.80	31.72	-0.20	0.00	0.51	1137.23	0.17	13.77	0.00	0.00



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer: Mack Energy Corporation Sample #: 81463
Area: Artesia Analysis ID #: 80383
Lease: Prince Rupert
Location: Fed #4H 0
Sample Point: Wellhead

		mg/l		meq/l	mg/l		meq/l
Sampling Date:	1/10/2019	Anions			Cations		
Analysis Date:	1/22/2019	Chloride:	89383.7	2521.19	Sodium:	53970.0	2347.56
Analyst:	Catalyst	Bicarbonate:	175.7	2.88	Magnesium:	1013.0	83.33
TDS (mg/l or g/m3):	150968.6	Carbonate:			Calcium:	2725.0	135.98
Density (g/cm3):	1.102	Sulfate:	2800.0	58.3	Potassium:	644.4	16.48
		Borate*:	190.4	1.2	Strontium:	55.6	1.27
		Phosphate*			Barium:	0.9	0.01
Hydrogen Sulfide:	5	*Calculated based on measured elemental boron and phosphorus.			Iron:	9.0	0.32
Carbon Dioxide:	97				Manganese:	0.857	0.03
Comments:				pH at time of sampling:			
				pH at time of analysis:			
				pH used in Calculation:	6.65		
				Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	200079
						Resistivity (ohm meter):	.0500

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.05	0.91	-0.13	0.00	-0.13	0.00	-0.11	0.00	1.22	0.60
100	0.13	2.72	-0.20	0.00	-0.13	0.00	-0.13	0.00	1.02	0.30
120	0.22	4.84	-0.26	0.00	-0.11	0.00	-0.15	0.00	0.84	0.30
140	0.30	7.26	-0.30	0.00	-0.06	0.00	-0.15	0.00	0.69	0.30
160	0.37	9.68	-0.34	0.00	0.00	6.96	-0.15	0.00	0.56	0.30
180	0.45	12.70	-0.37	0.00	0.08	166.07	-0.14	0.00	0.45	0.30
200	0.52	15.73	-0.40	0.00	0.18	328.81	-0.13	0.00	0.36	0.30
220	0.60	18.75	-0.42	0.00	0.28	485.19	-0.11	0.00	0.28	0.30



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer:	Mack Energy Corporation	Sample #:	78595
Area:	Artesia	Analysis ID #:	76096
Lease:	Chilliwack		
Location:	Fed Com 1H		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	11/28/2018	Chloride:	104292.8	Sodium:	63550.0
Analysis Date:	12/3/2018	Bicarbonate:	131.8	Magnesium:	1027.0
Analyst:	Catalyst	Carbonate:		Calcium:	2882.0
TDS (mg/l or g/m3):	175963.5	Sulfate:	3200.0	Potassium:	707.0
Density (g/cm3):	1.118	Borate*:	108.1	Strontium:	63.7
		Phosphate*		Barium:	0.8
Hydrogen Sulfide:	4	*Calculated based on measured elemental boron and phosphorus.		Iron:	0.1
Carbon Dioxide:	108			Manganese:	0.189
Comments:				Conductivity (micro-ohms/cm):	200381
				Resistivity (ohm meter):	.0499
		pH at time of sampling:	6.95		
		pH at time of analysis:			
		pH used in Calculation:	6.95		
		Temperature @ lab conditions (F):	75		

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.28	2.95	-0.07	0.00	-0.05	0.00	-0.04	0.00	1.17	0.30
100	0.32	3.84	-0.14	0.00	-0.06	0.00	-0.07	0.00	0.97	0.30
120	0.36	5.02	-0.21	0.00	-0.05	0.00	-0.09	0.00	0.79	0.30
140	0.39	6.20	-0.26	0.00	-0.01	0.00	-0.10	0.00	0.63	0.30
160	0.43	7.38	-0.31	0.00	0.05	111.64	-0.10	0.00	0.50	0.30
180	0.46	9.16	-0.34	0.00	0.12	261.08	-0.09	0.00	0.38	0.30
200	0.50	10.93	-0.38	0.00	0.21	418.50	-0.08	0.00	0.29	0.30
220	0.55	12.99	-0.41	0.00	0.31	573.26	-0.07	0.00	0.21	0.30



Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer: Mack Energy Corporation Sample #: 81533
Area: Artesia Analysis ID #: 80615
Lease: Saskatoon
Location: Fed Com 1H 0
Sample Point: Wellhead

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	1/10/2019	Chloride:	91681.1	Sodium:	54050.0
Analysis Date:	1/23/2019	Bicarbonate:	153.7	Magnesium:	1173.0
Analyst:	Catalyst	Carbonate:		Calcium:	2767.0
TDS (mg/l or g/m3):	151377.2	Sulfate:	700.0	Potassium:	647.0
Density (g/cm3):	1.105	Borate*:	144.3	Strontium:	60.1
		Phosphate*		Barium:	0.6
Hydrogen Sulfide:	4	*Calculated based on measured elemental boron and phosphorus.		Iron:	0.0
Carbon Dioxide:	90			Manganese:	0.416
Comments:				Conductivity (micro-ohms/cm):	197210
				Resistivity (ohm meter):	.0507
		pH at time of sampling:	7.23		
		pH at time of analysis:			
		pH used in Calculation:	7.23		
		Temperature @ lab conditions (F):	75		

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
°F										
80	0.57	6.35	-0.72	0.00	-0.71	0.00	-0.66	0.00	0.45	0.30
100	0.57	7.26	-0.79	0.00	-0.72	0.00	-0.69	0.00	0.25	0.00
120	0.58	8.77	-0.84	0.00	-0.69	0.00	-0.70	0.00	0.07	0.00
140	0.59	10.28	-0.89	0.00	-0.65	0.00	-0.71	0.00	-0.08	0.00
160	0.60	12.10	-0.93	0.00	-0.59	0.00	-0.70	0.00	-0.21	0.00
180	0.63	13.91	-0.96	0.00	-0.51	0.00	-0.70	0.00	-0.32	0.00
200	0.66	16.03	-0.99	0.00	-0.41	0.00	-0.69	0.00	-0.42	0.00
220	0.71	18.45	-1.01	0.00	-0.31	0.00	-0.67	0.00	-0.49	0.00

Underground Sources of Drinking Water- There is no USDW present.

Seismicity Risk Assessment- There is no risk of induced Seismicity.

Underground Sources of Drinking Water- There is no USDW present.

Seismicity Risk Assessment- There is no risk of induced Seismicity.

Well Name: LABRADOR SWD	Well Location: T15S / R29E / SEC 23 / NWSE / 32.9996373 / -104.9970742	County or Parish/State: CHAVES / NM
Well Number: 1	Type of Well: INJECTION - DISPOSAL	Allottee or Tribe Name:
Lease Number: NMNM138832	Unit or CA Name:	Unit or CA Number:
US Well Number: 3000564374	Well Status: Drilling Well	Operator: MACK ENERGY CORPORATION

Notice of Intent

Sundry ID: 2754628

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 10/03/2023	Time Sundry Submitted: 02:29
Date proposed operation will begin: 10/09/2023	

Procedure Description: Mack Energy Corporation request the following changes to the Labrador SWD #1- Name Change to Labrador SWD #1Y Unit J Sec. 23 T15S R29E 1978 FSL 1930 FEL Chaves, NM. Surface- Drill 17 1/2" hole to 450'. RIH w/ 13 3/8" csg 48# H-40 ST&C 0-450', C-3.29416, B-3.396419, T-3.46, J-17.47399. Cmt w/ 100sx RFC+12%PF53+2%PF1+5ppsPF42+.125ppsPF29, yld 1.61, density 14.4, mix H2O 7.357, tail 475sx Class C+1%PF1, yld 1.34, density 14.8, mix H2O 6.323, excess 100%, Additives- 20bbls Gelled Water, 50sx of 11# Scavenger Cement. Intermediate- Drill 12 1/4" to 2,900'. RIH w/ 9 5/8" csg 36# J-55 ST&C 0-2900', C-1.339523, B-7.04, T-7.04, J-4.455663. Cmt w/ 725sx Class C+45PF20+.4ppsPF45+.125PF29, yld 1.72, density 13.5, mix H2O 9.102, 50%excess, Slurry Top Surface, tail 200sx Class C+1%PF1, yld 1.34, density 14.8, Mix H2O 6.323, 50%excess, Slurry Top 1,900'. Additives- 20bbls Gelled Water, 50sx of 11# Scavenger Cement. Production- Drill 8 3/4" to 10,985'. RIH w/ 7" csg 26# HCP-110 LT&C 0-10,985', C-1.422394, B-3.081938, T-3.316667, J-2.844132. Cmt w/ 1,400sx 50/50 POZ C+5%(BWOW) PF44+2%PF204+.2%PF606+.1%PF153+.4ppsPF44, yld 1.34,density 14.2, mix H2O 6.091, 50%excess, Slurry Top 5,500'. Additives- 20bbls gelled water, 20bbls chemical wash DV Tool set at 5,500'.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

C_102_20231003121829.pdf

Well Name: LABRADOR SWD	Well Location: T15S / R29E / SEC 23 / NWSE / 32.9996373 / -104.9970742	County or Parish/State: CHAVES / NM
Well Number: 1	Type of Well: INJECTION - DISPOSAL	Allottee or Tribe Name:
Lease Number: NMNM138832	Unit or CA Name:	Unit or CA Number:
US Well Number: 3000564374	Well Status: Drilling Well	Operator: MACK ENERGY CORPORATION

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: DEANA WEAVER

Signed on: OCT 03, 2023 12:18 PM

Name: MACK ENERGY CORPORATION

Title: Production Clerk

Street Address: 11344 Lovington HWY

City: ArtesiaState: NM

Phone: (575) 748-1288

Email address: dweaver@mec.com

Field

Representative Name:

Street Address:

City:State:Zip:

Phone:

Email address:

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWSE / 1978 FSL / 1980 FEL / TWSP: 15S / RANGE: 29E / SECTION: 23 / LAT: 32.9996373 / LONG: -104.9970742 (TVD: 0 feet, MD: 0 feet)

PPP: 0 / 0 / SECTION: / LAT: 0.0 / LONG: 0.0 (TVD: 0 feet, MD: 0 feet)

BHL: NWSE / 1978 FSL / 1980 FEL / TWSP: 15S / RANGE: 29E / SECTION: 23 / LAT: 32.9996373 / LONG: -104.9970742 (TVD: 10985 feet, MD: 10985 feet)

CONFIDENTIAL

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 30-005-64374	² Pool Code 96101	³ Pool Name SWD; Devonian
⁴ Property Code 333611	⁵ Property Name LABRADOR SWD	⁶ Well Number 1Y
⁷ OGRID No. 13837	⁸ Operator Name MACK ENERGY CORPORATION	⁹ Elevation 3937.8

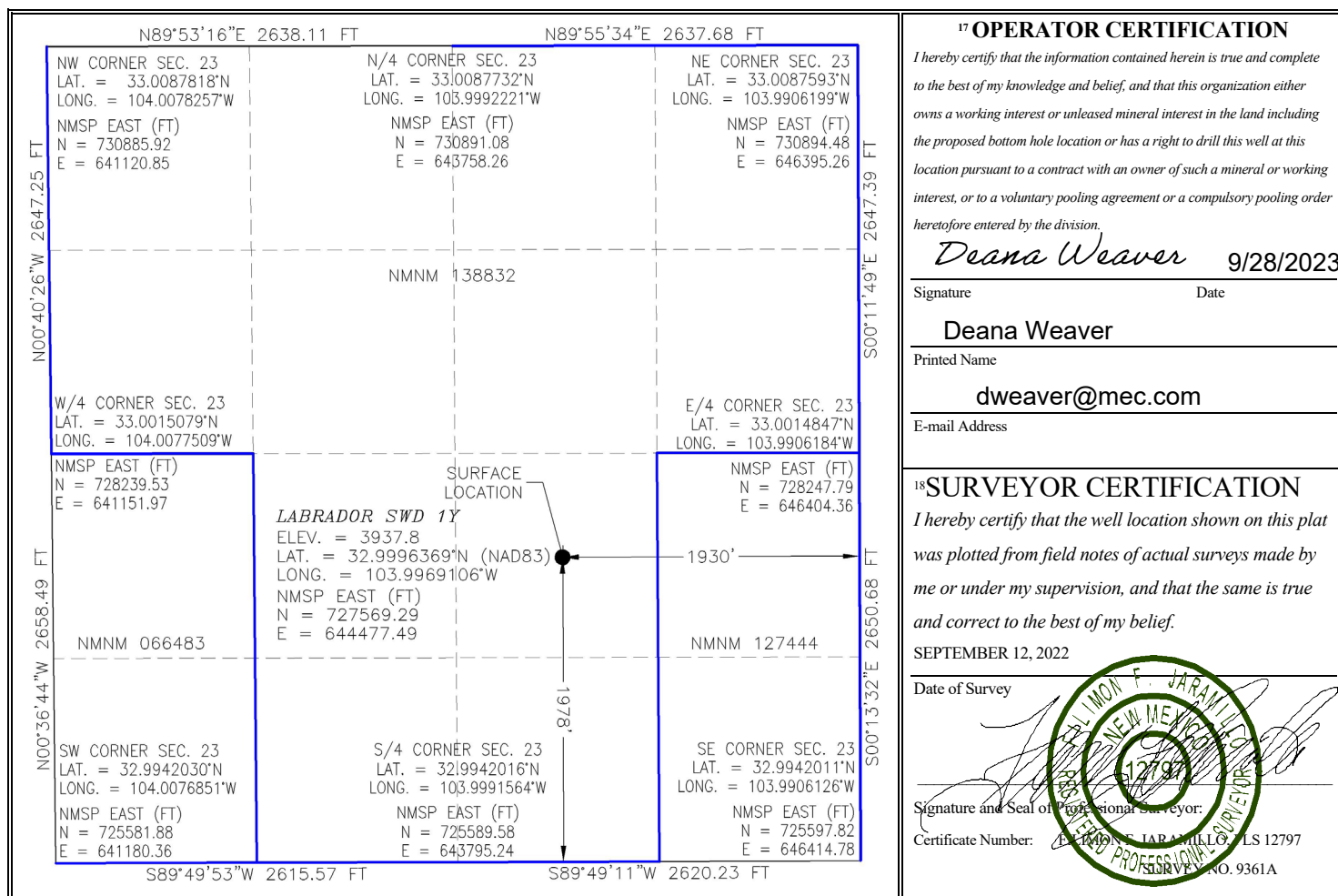
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	23	15 S	29 E		1978	SOUTH	1930	EAST	CHAVES

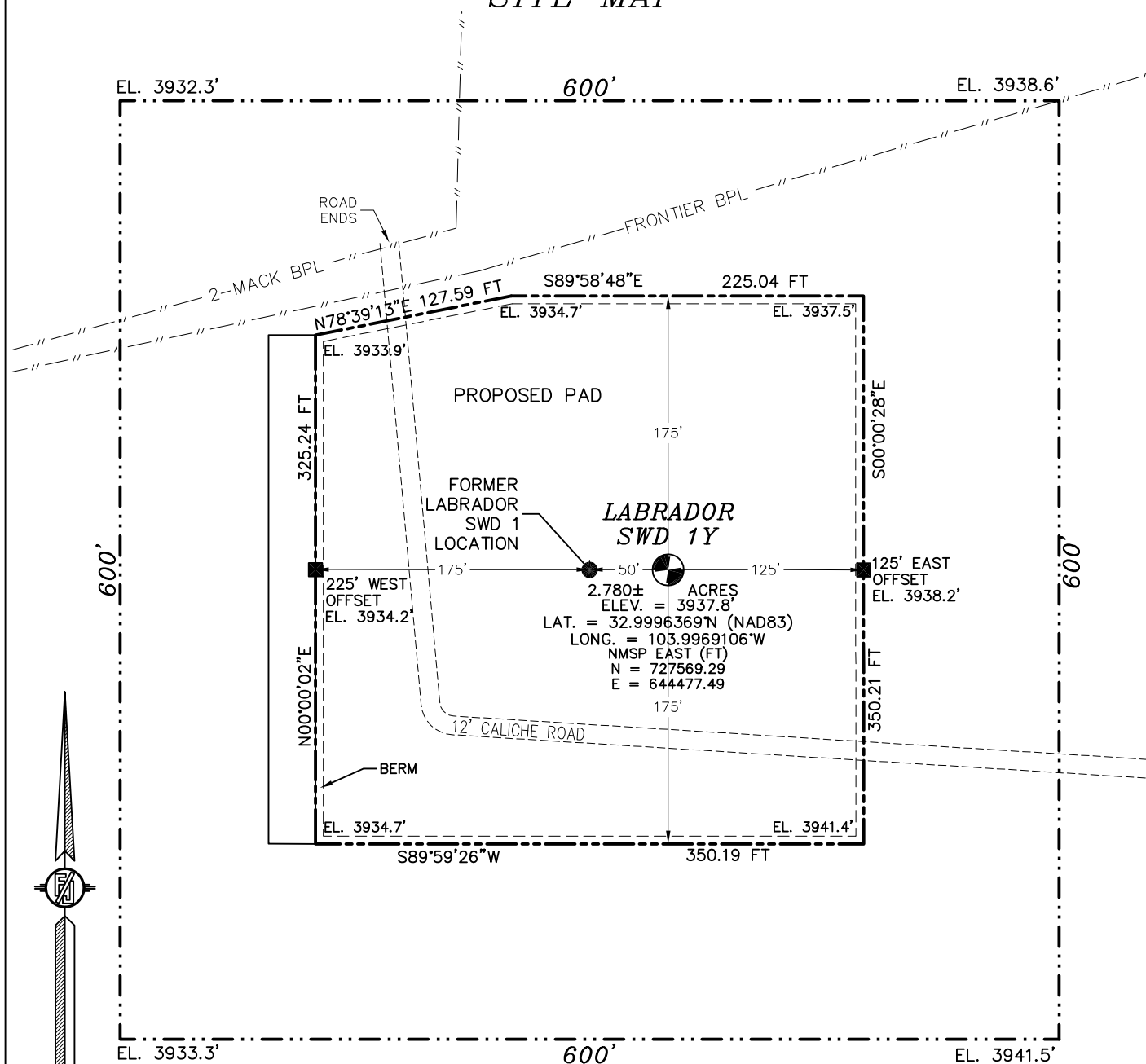
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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.



SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SITE MAP



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 82 & CO. RD. 217 (HAGERMAN CUTOFF), GO NORTH ON CO. RD. 217 APPROX. 12 MILES, TURN LEFT (WEST) ON 12' CALICHE LEASE ROAD AND GO APPROX. 0.6 OF A MILE TO THE SOUTHWEST PAD CORNER FOR THIS LOCATION.

I, FILMON E. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR, CERTIFY THAT THE DIRECTIONS AND DISTANCES SET FORTH IN THIS SURVEY, THAT THE LOCATION OF THE LABRADOR SWD 1Y WELL IS THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THE SURVEY MEETS THE MINIMUM STANDARDS FOR SUCH A SURVEY.

FILMON E. JARAMILLO 22709

MACK ENERGY CORPORATION
LABRADOR SWD 1Y

LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

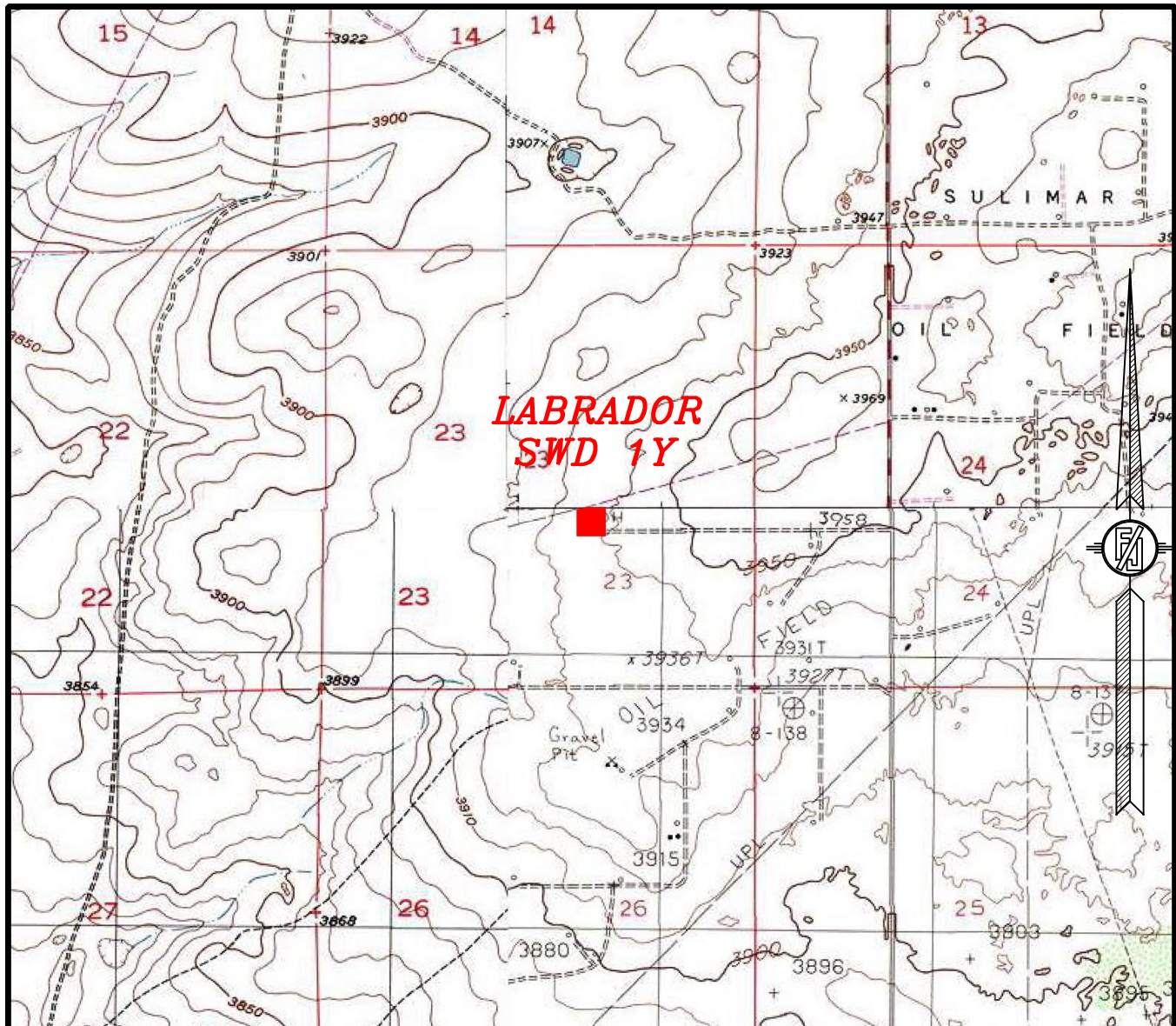
SEPTEMBER 12, 2023

SURVEY NO. 9361A

MADRON PROFESSIONAL SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327

CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
HENSHAW TANK
CEDAR POINT
KING CAMP
BASIN WELL

NOT TO SCALE

MACK ENERGY CORPORATION
LABRADOR SWD 1Y
LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

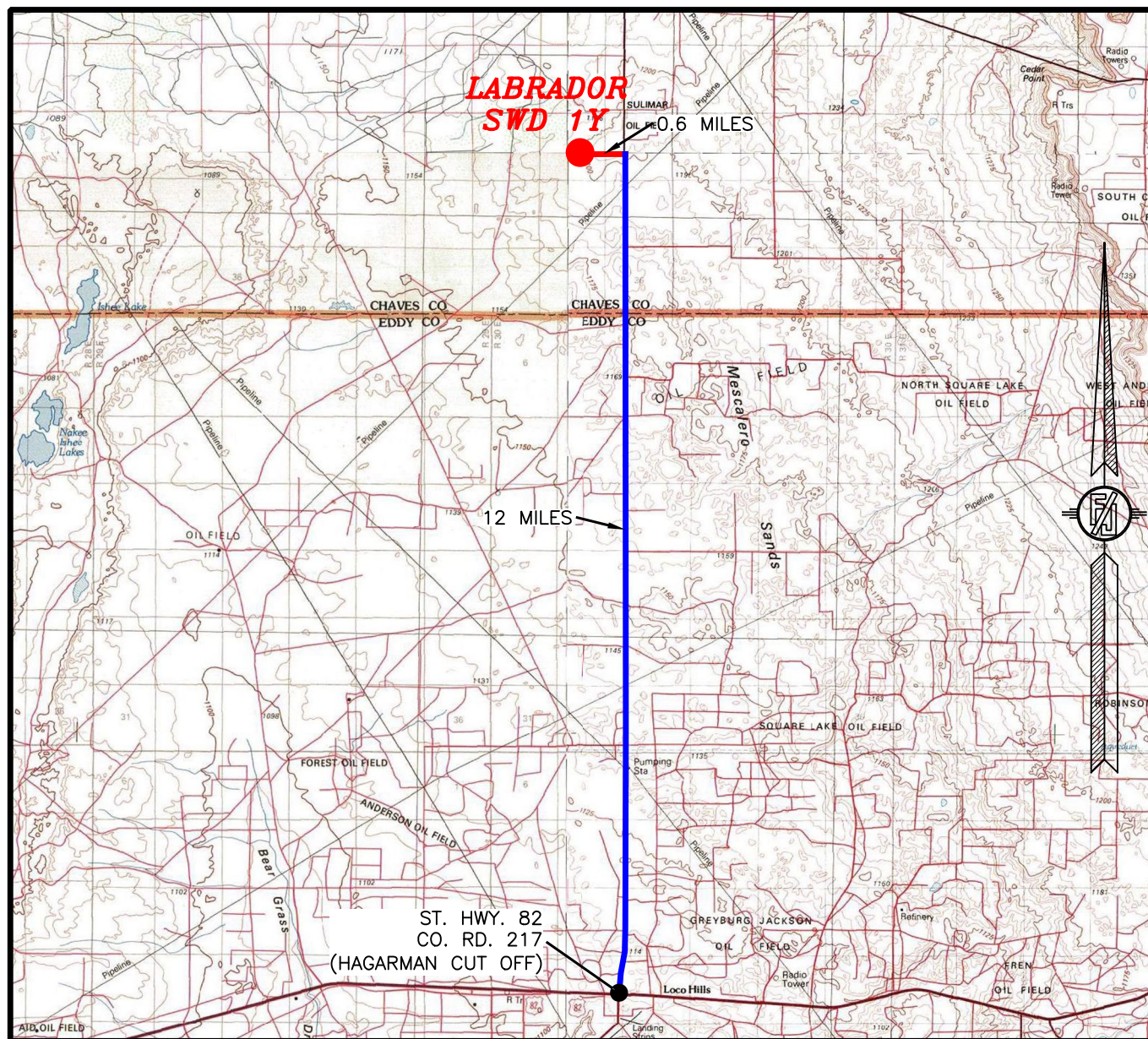
SEPTEMBER 12, 2023

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

SURVEY NO. 9361A
CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 82 & CO. RD. 217 (HAGERMAN CUTOFF), GO NORTH ON CO. RD. 217 APPROX. 12 MILES, TURN LEFT (WEST) ON 12' CALICHE LEASE ROAD AND GO APPROX 0.6 OF A MILE TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

MACK ENERGY CORPORATION
LABRADOR SWD 1Y
LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2023

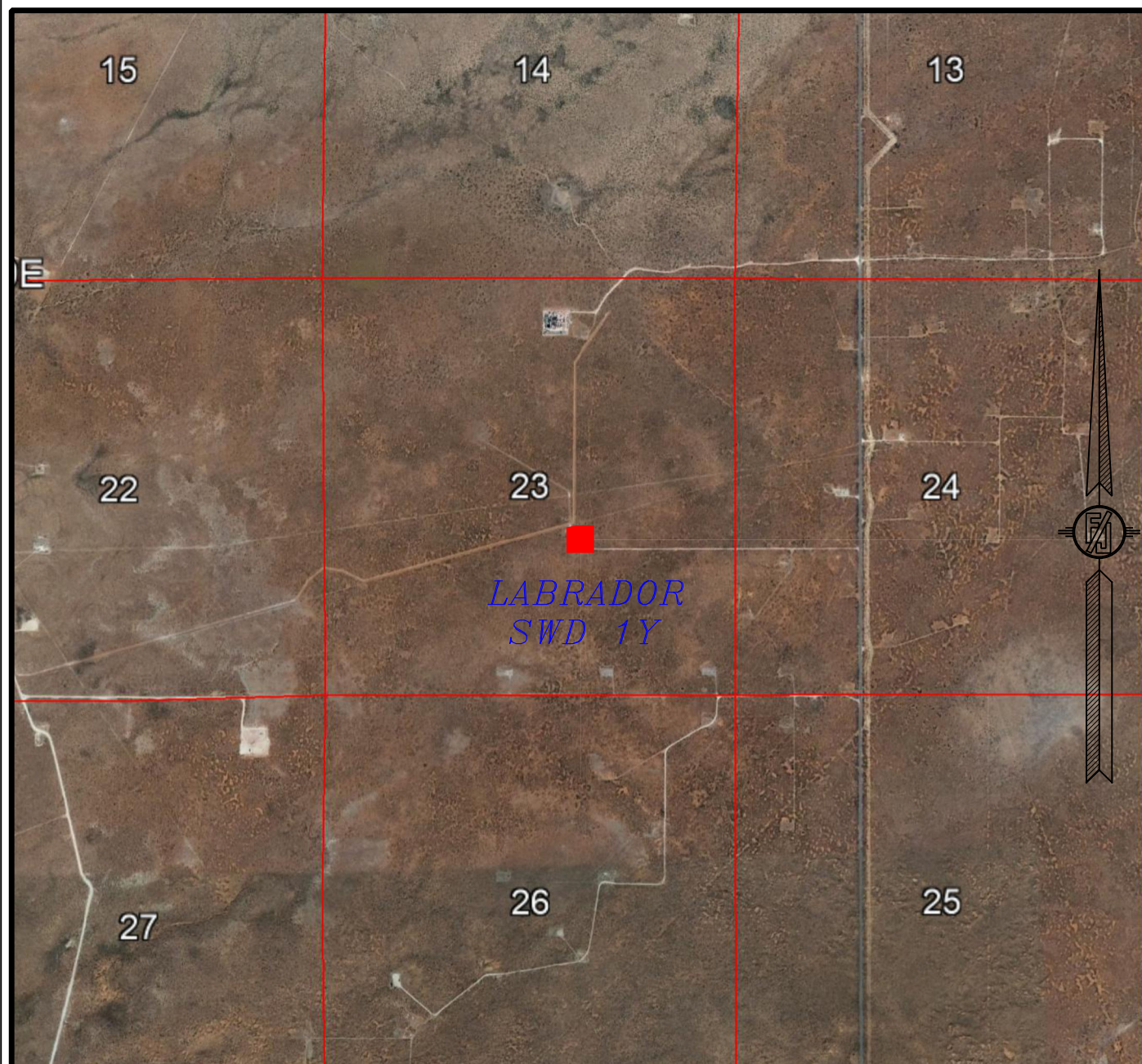
SURVEY NO. 9361A

MADRON SURVEYING, INC. 301 SOUTH CANAL

(575) 234-3327

CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DEC. 2019

MACK ENERGY CORPORATION
LABRADOR SWD 1Y
LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

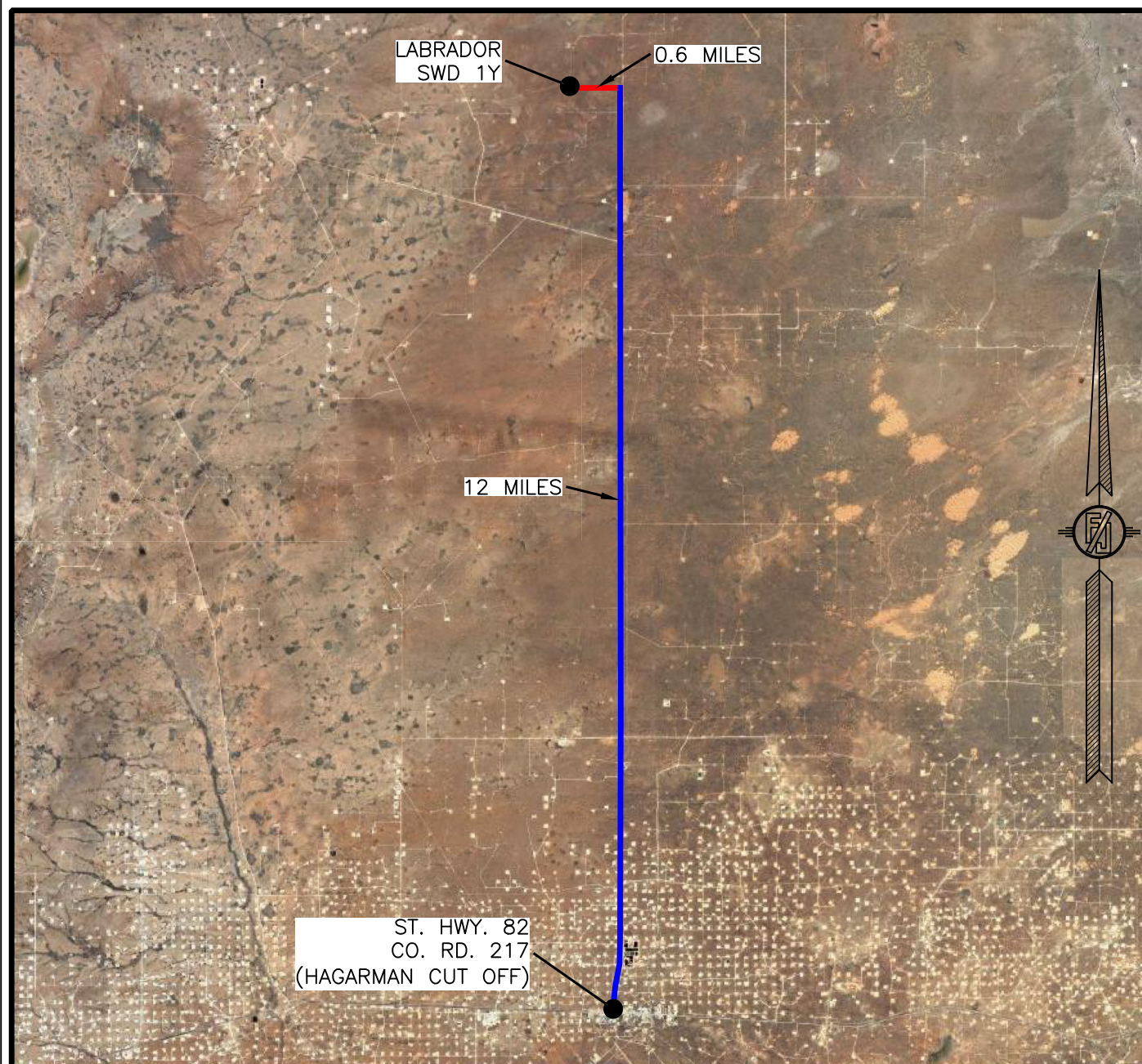
SEPTEMBER 12, 2023

SURVEY NO. 9361A

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3327

CARLSBAD, NEW MEXICO

SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DEC. 2019

MACK ENERGY CORPORATION
LABRADOR SWD 1Y
LOCATED 1978 FT. FROM THE SOUTH LINE
AND 1930 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 15 SOUTH,
RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2023

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

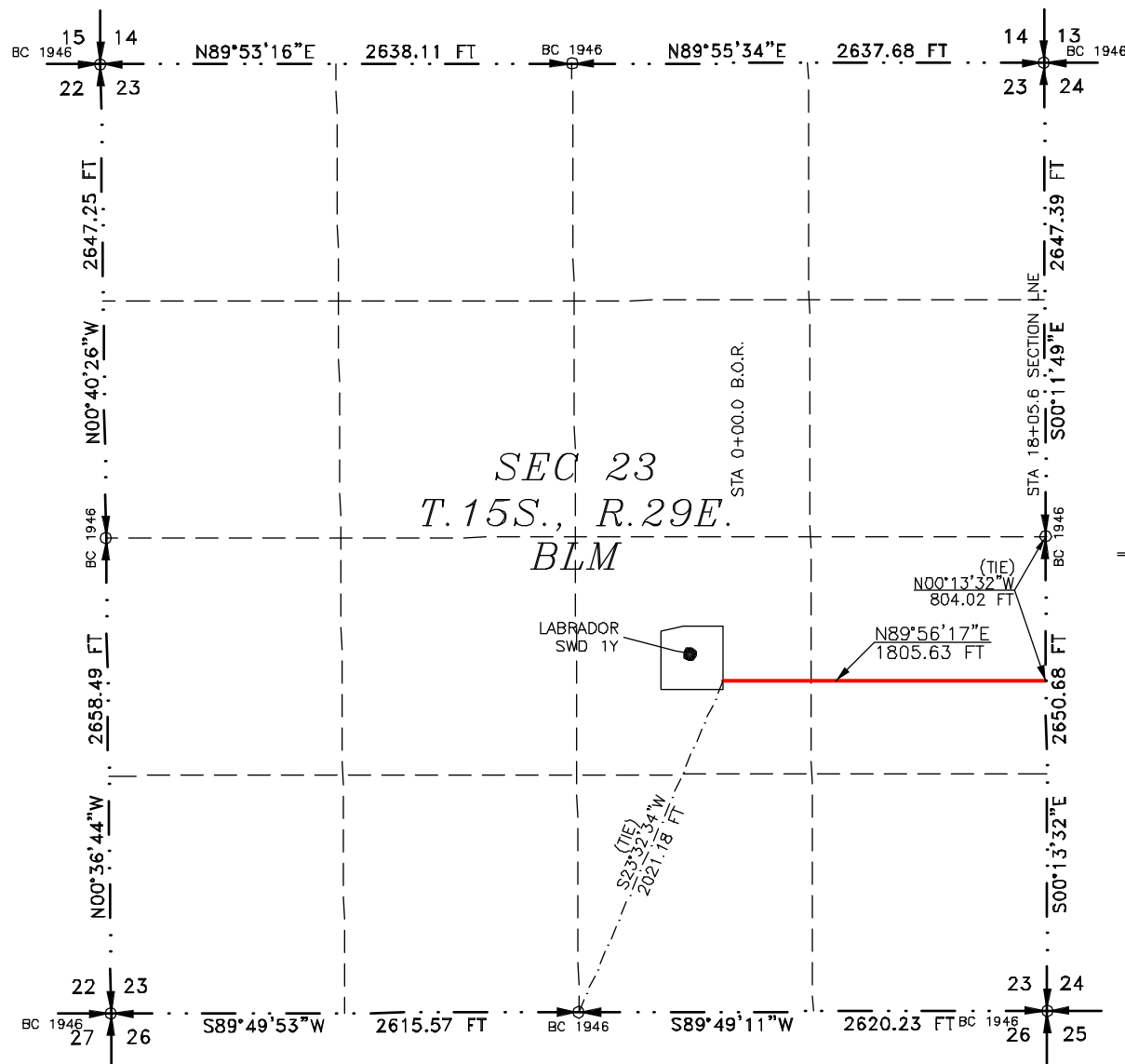
SURVEY NO. 9361A
CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

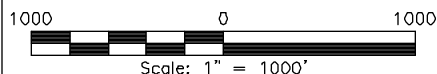
EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023**



SEE NEXT SHEET (2-4) FOR DESCRIPTION

**GENERAL NOTES**

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-4

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023

FILMON F. JARAMILLO
12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 9361A

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SW/4 SE/4 OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S23°32'34"W, A DISTANCE OF 2021.18 FEET;
 THENCE N89°56'17"E A DISTANCE OF 1805.63 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE EAST QUARTER CORNER OF SAID SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°13'32"W, A DISTANCE OF 804.02 FEET;

SAID STRIP OF LAND BEING 1805.63 FEET OR 109.43 RODS IN LENGTH, CONTAINING 1.244 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SE/4	492.92 L.F.	29.87 RODS	0.339 ACRES
NE/4 SE/4	1312.71 L.F.	79.56 RODS	0.904 ACRES

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023

FILIMON F. JARAMILLO
 12797
 NEW MEXICO PROFESSIONAL SURVEYOR
 MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (575) 234-3341

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 2-4

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
 (575) 234-3341

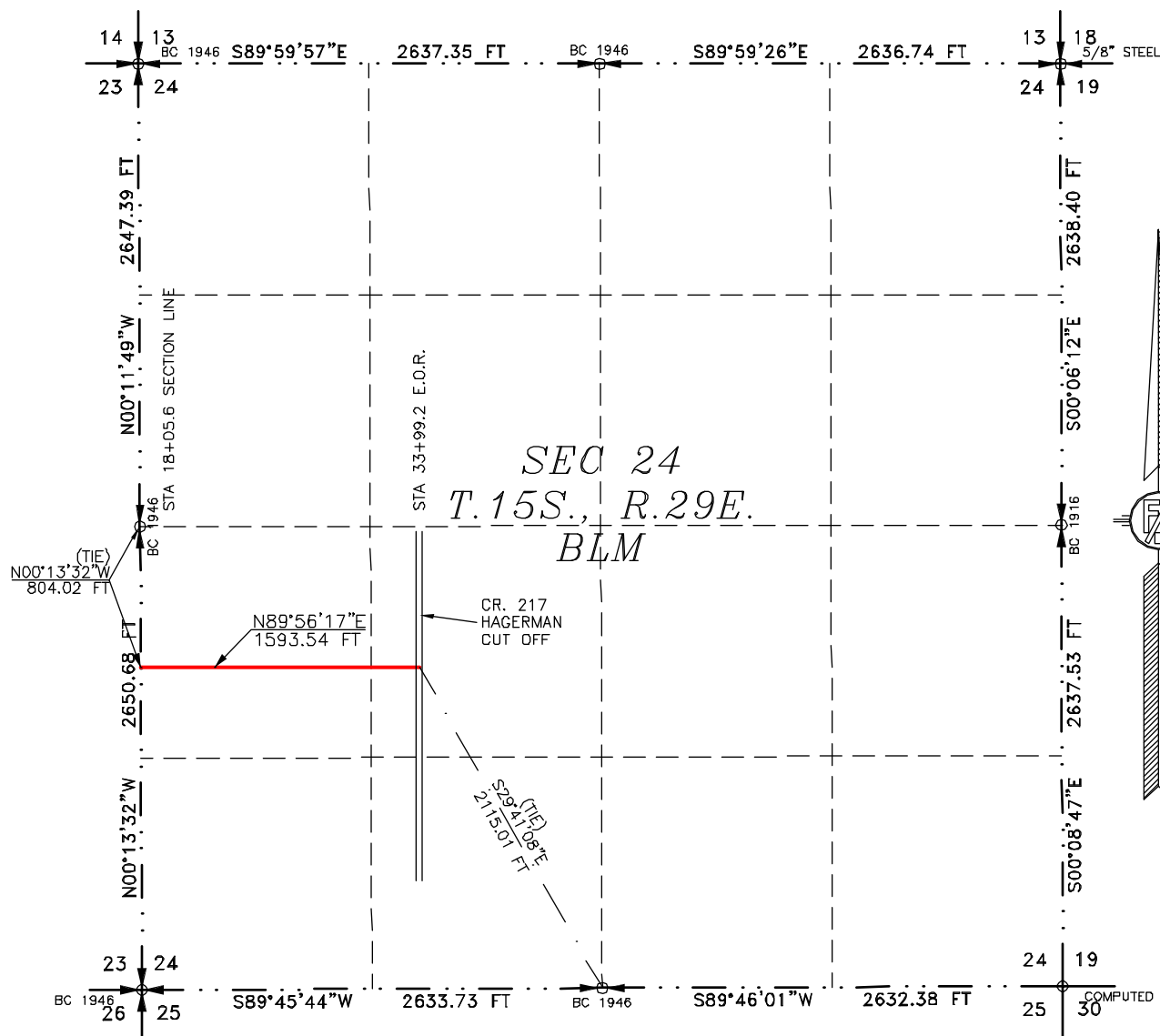
SURVEY NO. 9361A

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023**



SEE NEXT SHEET (4-4) FOR DESCRIPTION

**GENERAL NOTES**

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 3-4

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023

FILMON F. JARAMILLO
12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 9361A

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO LABRADOR SWD 1Y

MACK ENERGY CORPORATION

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2023**

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 SW/4 OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE WEST QUARTER CORNER OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°13'32"W, A DISTANCE OF 804.02 FEET;
THENCE N89°56'17"E A DISTANCE OF 1593.54 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 24, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S29°41'08"E, A DISTANCE OF 2115.01 FEET;

SAID STRIP OF LAND BEING 1593.54 FEET OR 96.58 RODS IN LENGTH, CONTAINING 1.097 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4	1317.95 L.F.	79.88 RODS	0.908 ACRES
NE/4 SW/4	275.58 L.F.	16.70 RODS	0.190 ACRES

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

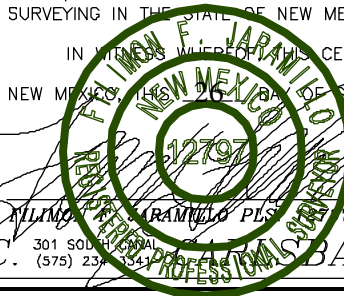
SHEET: 4-4

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220
(575) 234-3341

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 26TH DAY OF SEPTEMBER 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 9361A

Labrador SWD #1
1980 FSL 1980 FEL
Sec. 23 T15S R29E
Formation Tops

Quaternary	Surface
Top Salt	462'
Base Salt	1023'
Yates	1187'
San Andres	2605'
Glorieta	4060'
Tubb	5382'
Abo	6155'
Wolfcamp	7495'
Atoka	9689'
U. Miss	10,200'
L. Miss	10,435'
Devonian	10,985'
Montoya	11,525'
Simpson	11,725'
Ellenburger	11,992'

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 294126

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 294126
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	12/13/2023