

RECEIVED:	REVIEWER:	TYPE:	APP NO:
-----------	-----------	-------	---------

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: Basic Energy Services, L.P. **OGRID Number:** 246368
Well Name: Eunice Brine #001 **API:** 30-025-26884
Pool: BSW; Salado **Pool Code:** 96173

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
 Other: Brine Well
- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
 A. ☐ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☒ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☒ Surface owner
 G. ☐ 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.

2/25/2020

Date

Cory Walk

Print or Type Name

505-466-8120

Phone Number

Cory Walk

Signature

cory@permitswest.com

e-mail Address

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Revised August 1, 2011

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

☒ New ☐ Renewal

I. Facility Name: Eunice Brine #001

II. Operator: Basic Energy Services L.P.

Address: 801 Cherry, Suite 2100, Fort Worth Texas 76102

Contact Person: Gary Pritchett Phone: (432) 571-8159
Cory Walk (agent w/ Permits West Inc.) Phone: (505) 466-8120

III. Location: SW /4 SE /4 Section 34 Township 21S Range 37E

Submit large scale topographic map showing exact location.

Please see exhibit III

IV. Attach the name and address of the landowner of the facility site.

Chevron USA Inc.
PO Box 285
Houston Texas 77001
See Exhibit IV for Lea County Tax Assessor Records

V. Attach a description of the types and quantities of fluids at the facility.

Fresh water and 10# brine is used and stored at the facility.

Please see Exhibit V for 2018-present amounts of fresh interring, brine extraction amounts, PSI, and ratio of fresh to brine.

VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.

The Eunice Brine facility transfers fresh water from the City of Eunice water line into a fiberglass 1000 bbl tank where it is stored. A lateral pump takes the water from the storage tank and transfers the fresh water down the tubing allowing it to brine with the Salado formation in Marker bed 9. 10# Brine water comes up the casing where it is metered and stored in the facility battery. The total capacity at the facility for brine is 4000 bbls. Four (4) 1000 bbl tanks are used for storage. Please see Exhibit VI for a schematic of the facility.

VII. Attach a description of underground facilities (i.e. brine extraction well).

The only underground facility is the brine extraction well and its associated piping construction. Please see Exhibit VII for a well bore schematic of the brine extraction well and the following C108 application for a detailed description of the well construction.

VIII. Attach a contingency plan for reporting and clean-up of spills or releases.

Contingency Plan:

Basic Energy Services L.P. has implemented an integrated system that monitors levels within the storage vessels by using GWR (guided wire radar) system and Sonar guided within the freshwater tanks. This system will shut down the pump if levels that are set hit critical. They send an alarm via satellite and received by telephone. The operation will then be looked at and once all systems are clear operations will reset computer back in operation. Unloading pads were placed where Brine is sold with actuation valves that are opened once a security number is activated at the systems PLC. Flow meters were not installed on the sales line. All brine water sold is recorded by the driver at the PLC with an access code number and a ticket is filled out. This allows the party buying the Brine to enter the exact amount of barrels to be bought. This will minimize human failure from occurring while loading. The facility has a berm around the tanks and is lined with a 20 mil liner which will contain 110% of total fluid stored at the facility. Also, the location has a berm to secure any failure.

Release Reporting:

Basic Energy Services L.P. will report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan that may exceed the standard specified at 20.6.2.3103 NMAC. The OCD's Environmental Bureau will then be notified with a report.

Oral Notifications:

Basic Energy Services L.P. will notify the OCD's Environmental Bureau and provide them with the name, address, and telephone number of the person in charge of the facility, and the owner of the facility including the name and location, date, time, and the duration of the discharge. The source and cause of the discharge, description of the discharge, including its chemical composition, with the estimated volume of the discharge and any corrective or abatement action taken to mitigate immediate damage from the discharge will be provided to the OCD Environmental Bureau.

Written Notification:

Basic Energy Services will send written notice on form C-141 with all attachments within one week of a discharge to OCD's Environmental Bureau verifying prior oral notification.

SPCC/Guidelines for Remediation:

Basic Energy Services L.P. will use the SPCC plan & oil/saltwater contingency plan and the guidelines for remediation of leaks, spills and releases. Basic Energy will hand a copy on request.

IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.

Three principal unconfined aquifers are used for potable groundwater in Lea County; these geologic units include the Triassic Santa Rosa formation, Tertiary Ogallala formation, and Quaternary alluvium. Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is regarded as the effective lower limit of 'potable' ground water." In the Eunice area, the Dewey Lake red beds lie atop the Permian Rustler Formation (See Exhibit IXa and IXb). These red beds are relatively impermeable and prevent the vertical movement of groundwater between the freshwater aquifer above and the Salado Formation below. NMOSE records of water wells within a 1-mile radius of the Eunice Brine #001 well indicate an average depth to water of 43 feet with a minimum depth of 27 feet and a maximum depth of 100 feet.

The Quaternary Alluvium and Tertiary Ogallala Formation, in which fresh water is present, are primarily unconsolidated sand, silt, clay and gravel. The underlying Dewey Lake Formation consists of red siltstone, clay and shale and has a thickness of approximately 200' in this area. Below the Dewey Lake Formation is the Permian Rustler Formation which is primarily evaporites (anhydrite/gypsum) with some thin beds of dolomite, sandstone, shale, and siltstone. Based on the 2014 well completion report the top anhydrite was reported at 668' and the top salt was reported at 1235' giving a Rustler Formation thickness of approximately 567'. The Salado Formation is primarily halite (salt) and is approximately 1200' thick in this area. The Salado Formation is the primary injection zone in which fresh water will be injected and brine water will be produced and extracted.

The combined Rustler Formation (567') and Dewey Lake Formation (200') gives over 750' of relatively impermeable strata acting as a barrier and preventing the introduction of brine water from the Salado Formation into the near surface freshwater aquifer system. Enough casing and cementing through all strata and 200+ feet into the Salado Formation gives

further evidence that the brine extraction operations will not adversely impact fresh water. Please see the attached exhibits IXc and IXd for a cement bond log and mechanical integrity test performed within the Eunice Brine #001 well (both of which are already on NMOCD online records).

- X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

Basic Energy Services L.P. has made efforts to comply with all compliance reviews issued by NMOCD. Please refer to the Annual Report submitted to NMOCD on 1/31/2020 for discussions of compliance. Basic Energy is also currently working on a response to NMOCD comments issued 2/13/2020.

XI. CERTIFICATION:

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Name: Cory Walk

Title: Consultant

Signature: 

Date: February 24, 2020

E-mail

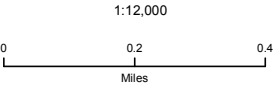
Address: cory@permitswest.com

Basic Energy Services L.P.

Eunice Brine Well #1
Topographic Map

630' FSL & 2427' FEL
Sec. 34, Township 21S, Range 37E
Lea County, New Mexico

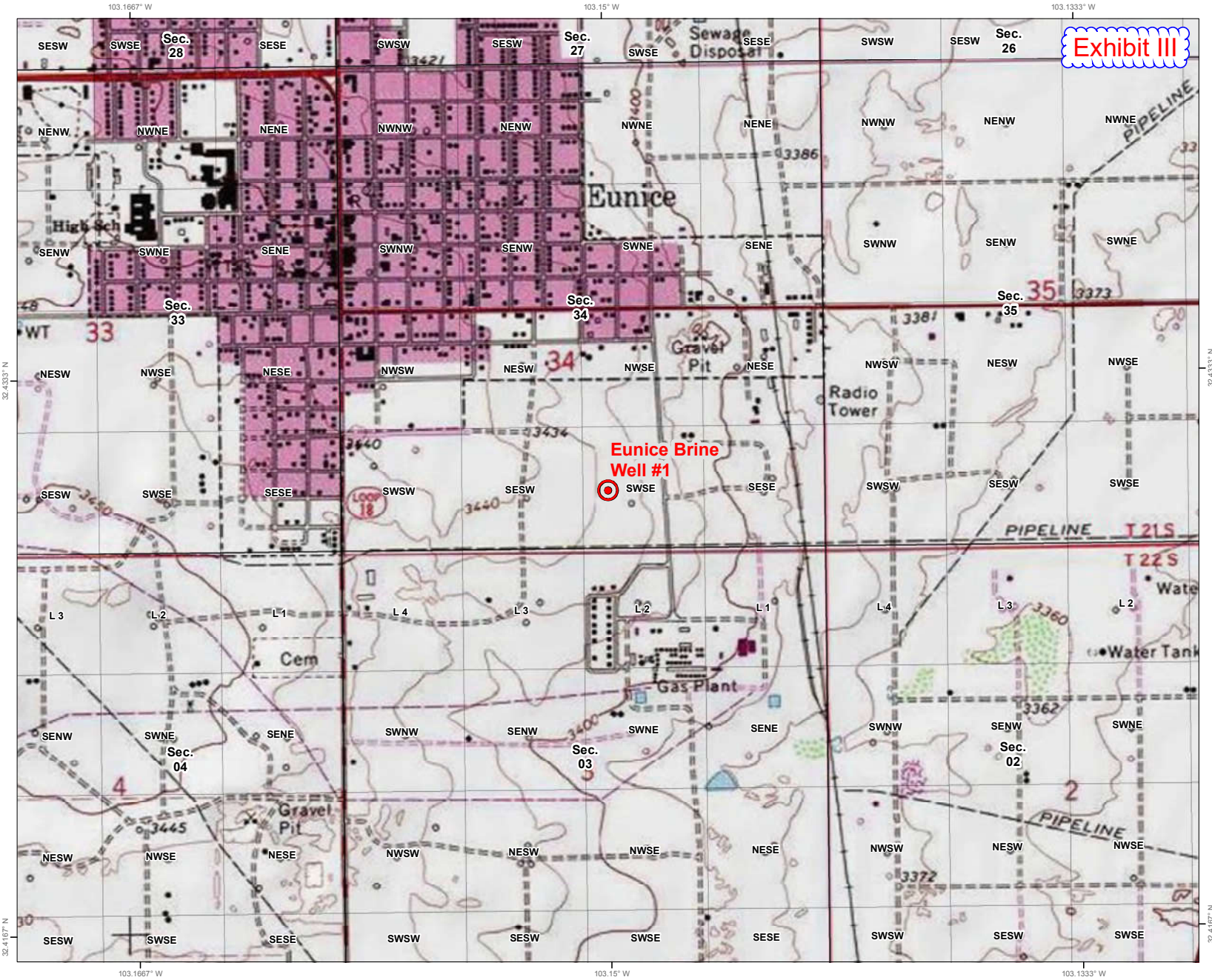
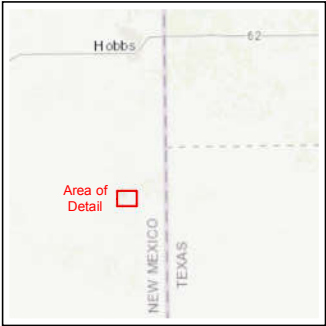
 Eunice Brine Well #1



NAD 1983 New Mexico State Plane East
FIPS 3001 Feet



Prepared by Permits West, Inc., December 4, 2018
for Basic Energy Services L.P.





Lea County
GIS INTERNET REPORT
Page 1 of 3



Assessment Information

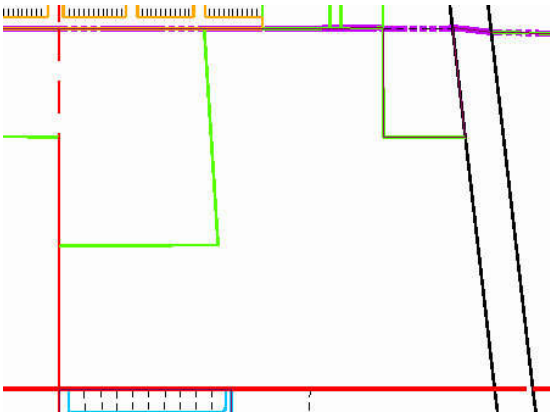
OWNER NUMBER: 50207
PARCEL NUMBER: 4000502160001

UPC CODE: 4000502160001

Owner Information	
Owner:	CHEVRON U S A INC
Mailing Address:	PO BOX 285 HOUSTON TX 77001
Property Address:	

Subdivision Information	
Name:	
Unit:	
Block	
Lot:	

Legal Information
66.09 AC LOC SE4





Lea County

GIS INTERNET REPORT



Page 2 of 3

Other Information			
Taxable Value:	\$117,439.00	Deed Book:	1654
Exempt Value:	\$0.00	Deed Page:	187
Net Value	\$117,439.00	District:	080
Livestock Value:	\$0.00	Section:	34
Manufactured Home Value:	\$0.00	Township:	21
Personal Property:	\$0.00	Range:	37
Land Value:	\$352,317.00	Date Filed:	
Improvement Value:	\$0.00	Most Current Tax:	\$3,807.45
Full Value:	\$352,317.00	Year Recorded:	2009

Square Foot and Year Built listed only to be used for comparative purposes, NOT to be used for commerce.

Lea County, New Mexico Disclaimer

Information deemed reliable but not guaranteed. Copyright ©2012.
MAP TO BE USED FOR TAX PURPOSES ONLY. NOT TO BE USED FOR CONVEYANCE.



Lea County

GIS INTERNET REPORT

Page 3 of 3



Lea County, New Mexico Disclaimer

Information deemed reliable but not guaranteed. Copyright ©2012.
MAP TO BE USED FOR TAX PURPOSES ONLY. NOT TO BE USED FOR CONVEYANCE.

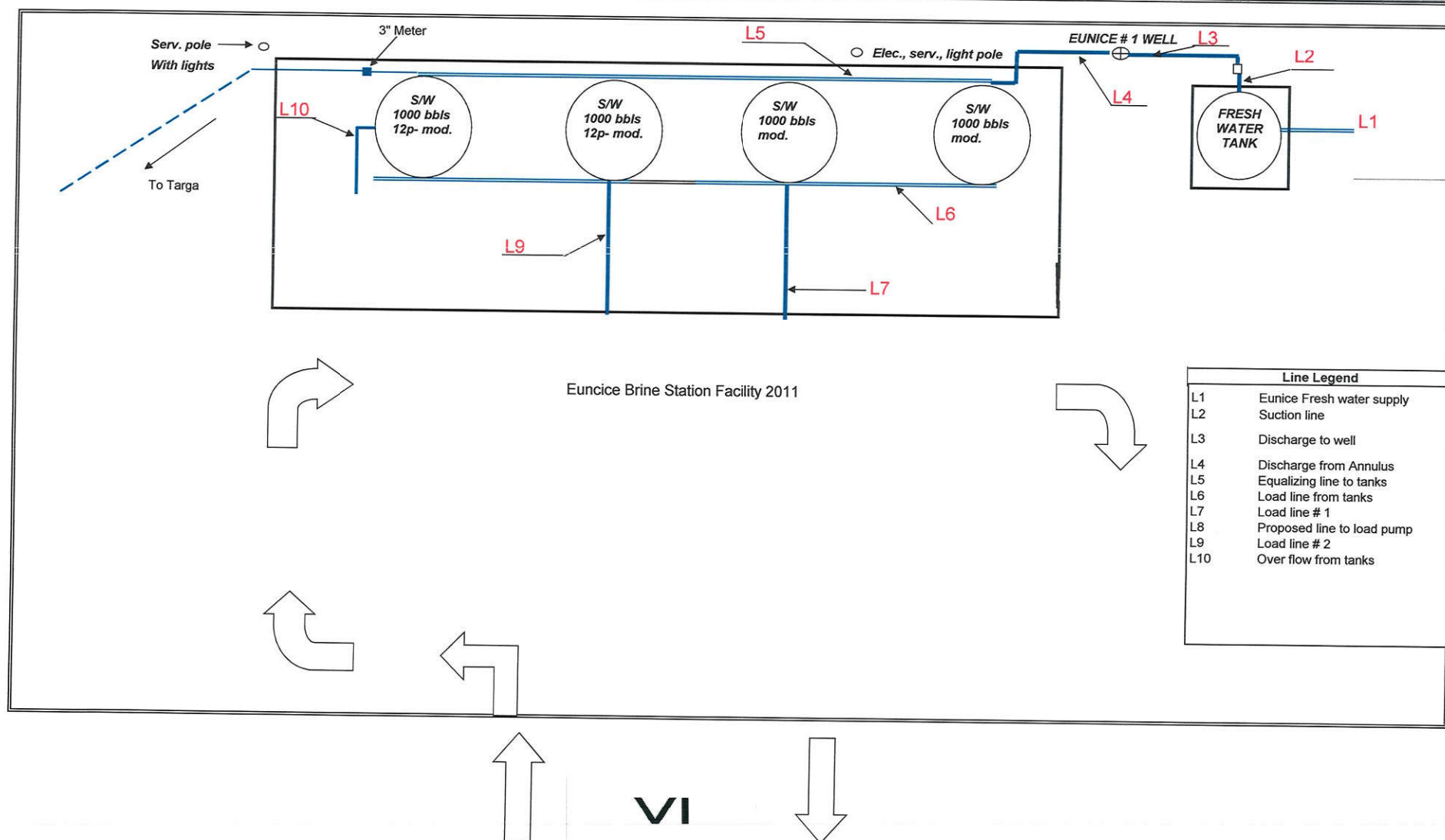
Exhibit V

Basic Energy Services L.P.
Eunice Brine 001
Totals of Brine and Fresh Water
2018-2019

Lease		BES Asset #		API		FOOTAGE		UNIT	SEC	TOWNSHIP	RANGE	County
Eunice Brine #1		18476		30-025-26884		630 FSL	2427 FEL	O	34	21S	37E	LEA
BES			Brine	400	Max PSI			Fresh		Well Monthly capability 81,840 bbl.		
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine	Year throughput capability 982,080 Bbl.			
Jan	0	13,917	13,917	250	0	21,072	21,072	66.0				
Feb	13,917	22,180	8,263	250	21,072	33,585	12,513	66.0				
Mar	0	6,319	6,319	250	0	9,451	9,451	66.9	Reset meters to 0 3.1.18			
Apr	6,319	28,216	21,897	250	9,451	32,886	23,435	93.4	Reset meters to 0 4.30.18			
May	0	20,777	20,777	250	0	26,844	26,844	77.4				
Jun	20,777	28,755	7,978	250	26,844	40,141	13,297	60.0				
July	28,755	40,817	12,062	250	40,141	55,627	15,486	77.9				
August	40,817	50,664	9,847		55,677	67,734	12,057	81.7				
Sep	0	17,366	17,366		0	18,780	18,780	92.5	New Meter 9.1.18			
Oct	17,366	34,263	16,897		18,780	36,872	18,092	93.4				
Nov	34,263	56,488	22,225		36,872	59,534	22,662	98.1				
Dec	0	12,472	12,472		0	12,712	12,712	98.1	Reset meters to 0			
Year total			170,020				206,401	82.4				
					ENDING TOTAL FOR 2018							
Lease		BES Asset #		API		FOOTAGE		UNIT	SEC	TOWNSHIP	RANGE	County
Eunice Brine #1		18476		30-025-26884		630 FSL	2427 FEL	O	34	21S	37E	LEA
BES			Brine	400	Max PSI			Fresh		Well Monthly capability 81,840 bbl.		
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine	Year throughput capability 982,080 Bbl.			
Jan	12,472	12,472	0	250	12,712	12,712	0	N/A	Shut in well 1.11.19			
Feb			0				0					
Mar			0				0					
Apr			0				0					
May			0				0					
Jun			0				0					
July			0				0					
August			0				0					
Sep			0				0					
Oct			0				0					
Nov			0				0					
Dec			0				0					
Year total			0				0					
					RUNNING TOTALS FOR 2019							

Exhibit VI

BASIC ENERGY SERVICES EUNICE # 1 SWBS



Basic Energy Services LP
 Eunice Brine # 001 Bw-002
 630' FSL, 2427' FEL, Unit (O), Sec 34, T21S, R37E
 API # 30-025-26884

CURRENT
 1/22/2014

2 7/8"

Surface Hole
 Bit Size N/A

Inter. Hole
 Bit Size N/A

Cement Data:

Lead - _____
 Tail - _____
 Note - _____

Bit size 8 3/4"

Tree Connection 2 7/8 J-55 PC TBG.

Production 2 7/8" J-55 PC TBG

Setting Depth 1544'

Surface Casing: NONE

Setting Depth @ N/A

Interm. Casing: NONE

Setting Depth: NONE

Liner Casing 5.5 15.5# FJ
102sx "C" 20sx excess cir surf.

Setting Depth 1375'

Production Csg.: 7" 24# / 20#
700SX CIR. SURF

Setting Depth @ 1450'

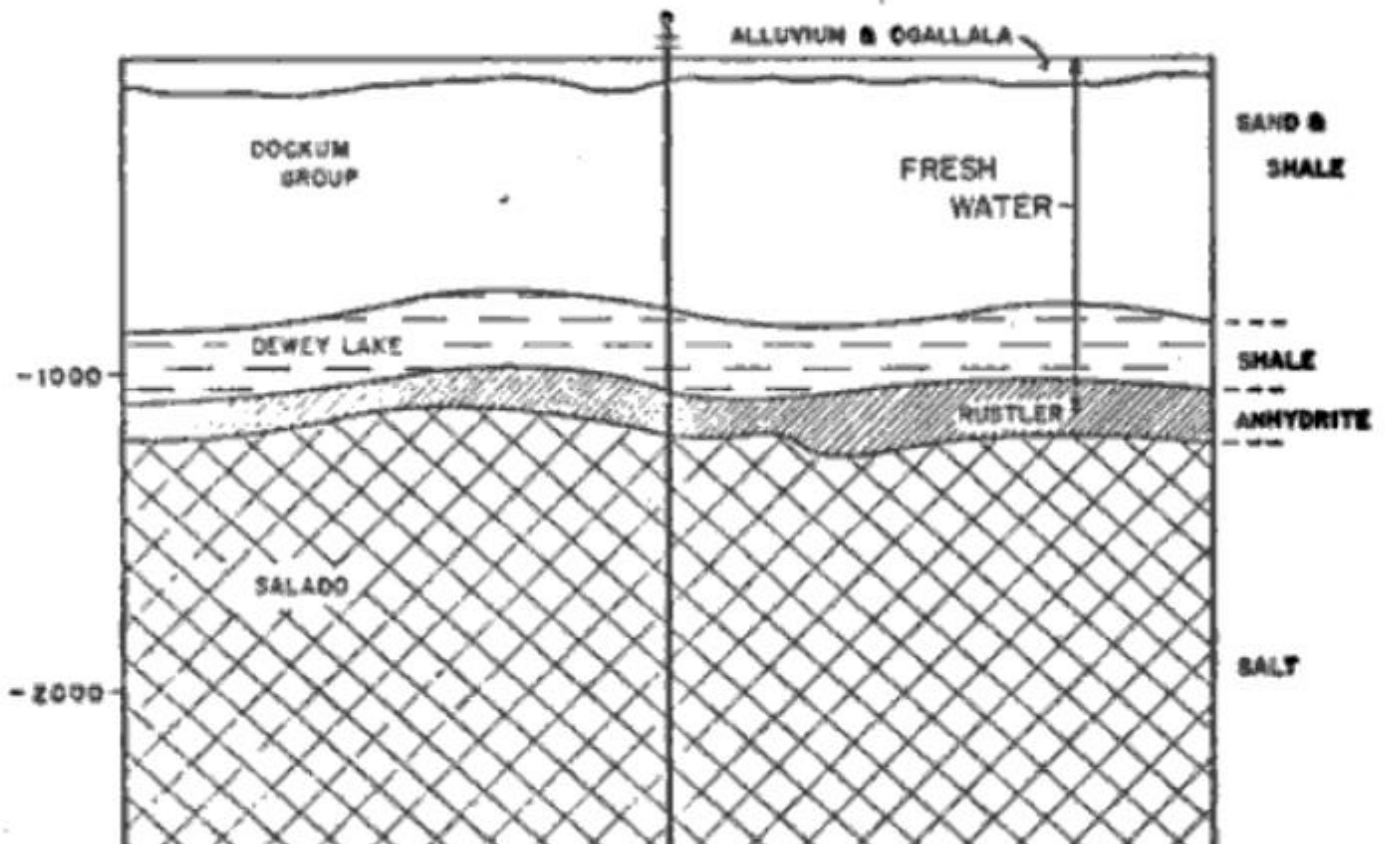
PBTD: NO PBTD

OPEN HOLE yes

DEPTH OH 1800'

TD @ 1818'

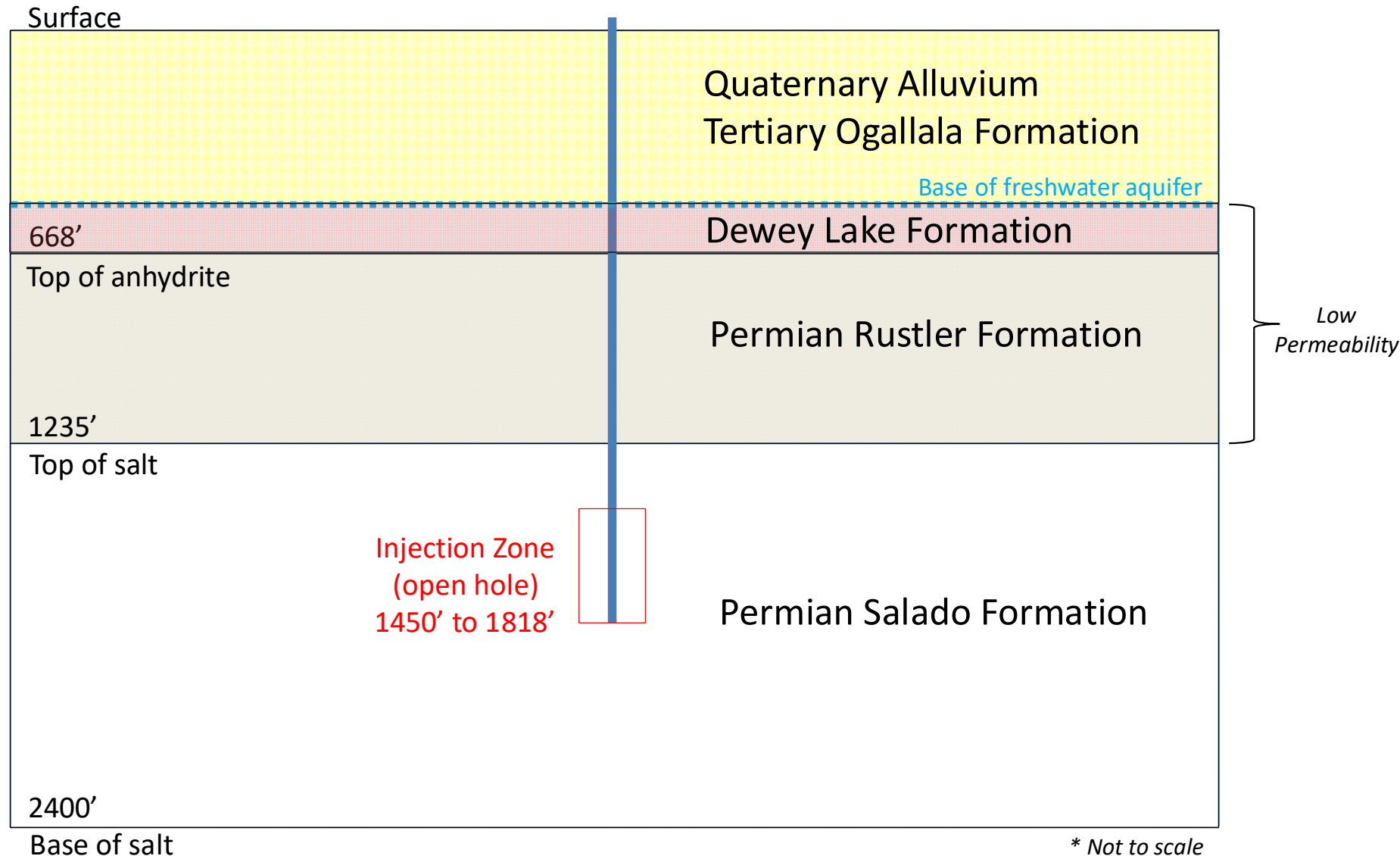
SCHEMATIC OF A LEA COUNTY INJECTION WELL M. HOLLAND OGD '80



Quality of Drinking Water--1980, Hearings Before the Subcommittee on Health and the Environment of the Committee on Interstate and Foreign Commerce, House of Representatives, Ninety-sixth Congress, Second Session, on Gathering Information to Help the Subcommittee Get a Better Grasp of Our Drinking Water Problems Across the Nation, June 6, 9, and August 18, 1980 – United States. Congress. House. Committee on Interstate and Foreign Commerce. Subcommittee on Health and the Environment

Eunice Brine
Well #001
30-025-26884

Exhibit IX b.



Generalized cross-section based on formation tops from 2014 well completion report.



CEMENT BOND
GAMMA RAY
CCL/LOG

Company BASIC ENERGY SERVICES,LP
Well EUNICE NO.001
Field
County LEA
State N.MEX

Company BASIC ENERGY SERVICES,LP
Well EUNICE NO.001
Field
County LEA
State N.MEX

Location: API #: 3002526884
County LEA
State N.MEX

Permanent Datum 630FSL&2427FEL
Log Measured From G.L. Elevation G.L.
Drilling Measured From K.B. Elevation K.B. N/A
Other Services D.F. G.L.

Date 12-28-2010

Run Number ONE

Depth Driller

Depth Logger 1450

1 Logged Interval 1447

Log Interval SURF.

Open Hole Size N/A

Type Fluid WATER

Density / Viscosity N/A

Max. Recorded Temp. N/A

Estimated Cement Top SURF.

Time Well Ready 0730

Time Logger on Bottom 0800

Equipment Number 12

Location

Recorded By HOBBS,NM

Witnessed By PAUL ZARAGOZA

DAVID ALVARADO

Run Number

Bit From To Size Weight From To

Casing Record

Surface String Size Weight Top Bottom

Prot. String 7" SURF. 1464

Production String

Liner

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

LOG RAN ON WIRELINE DEPTH

MAIN PASS 0 PSI

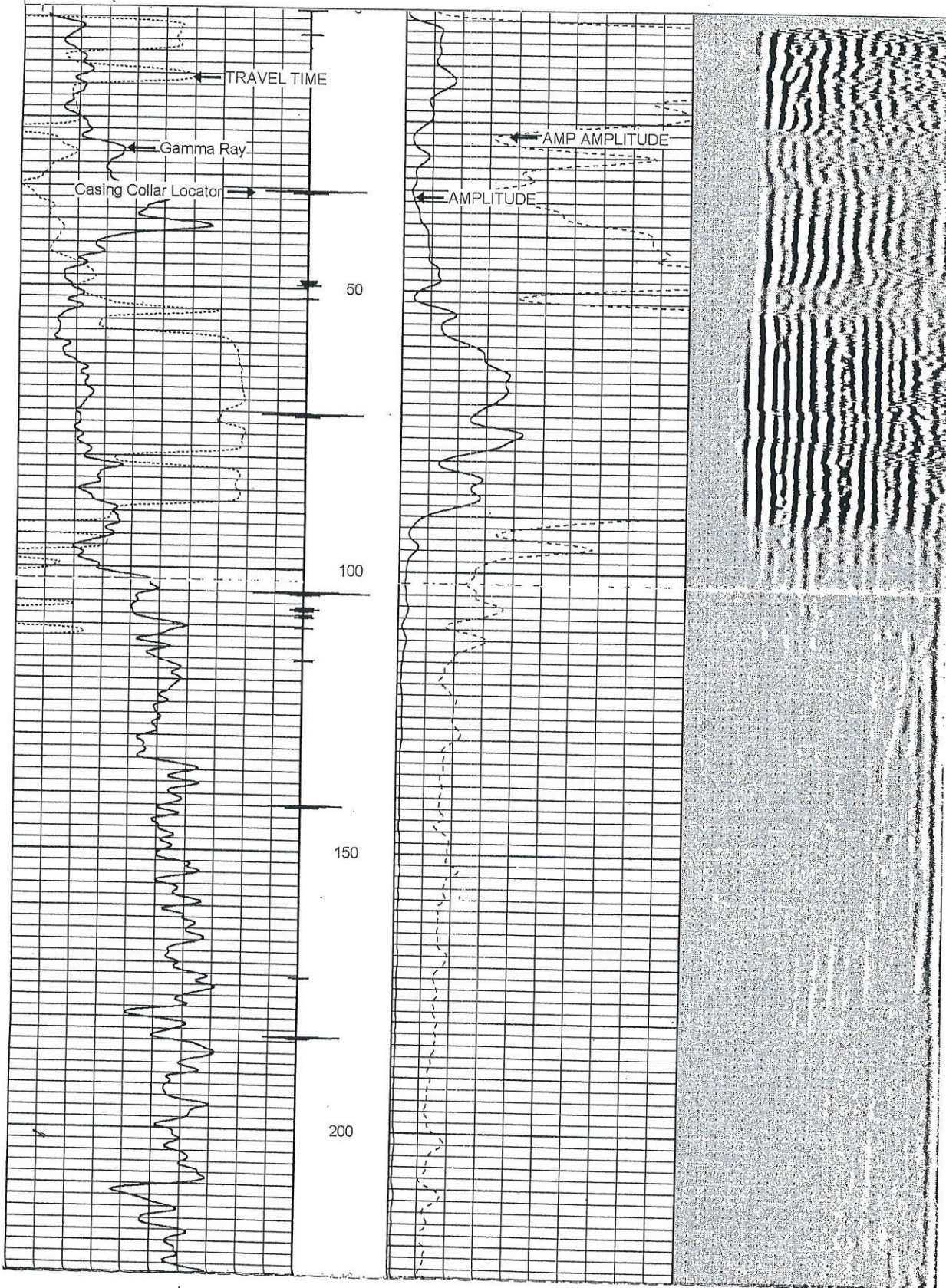


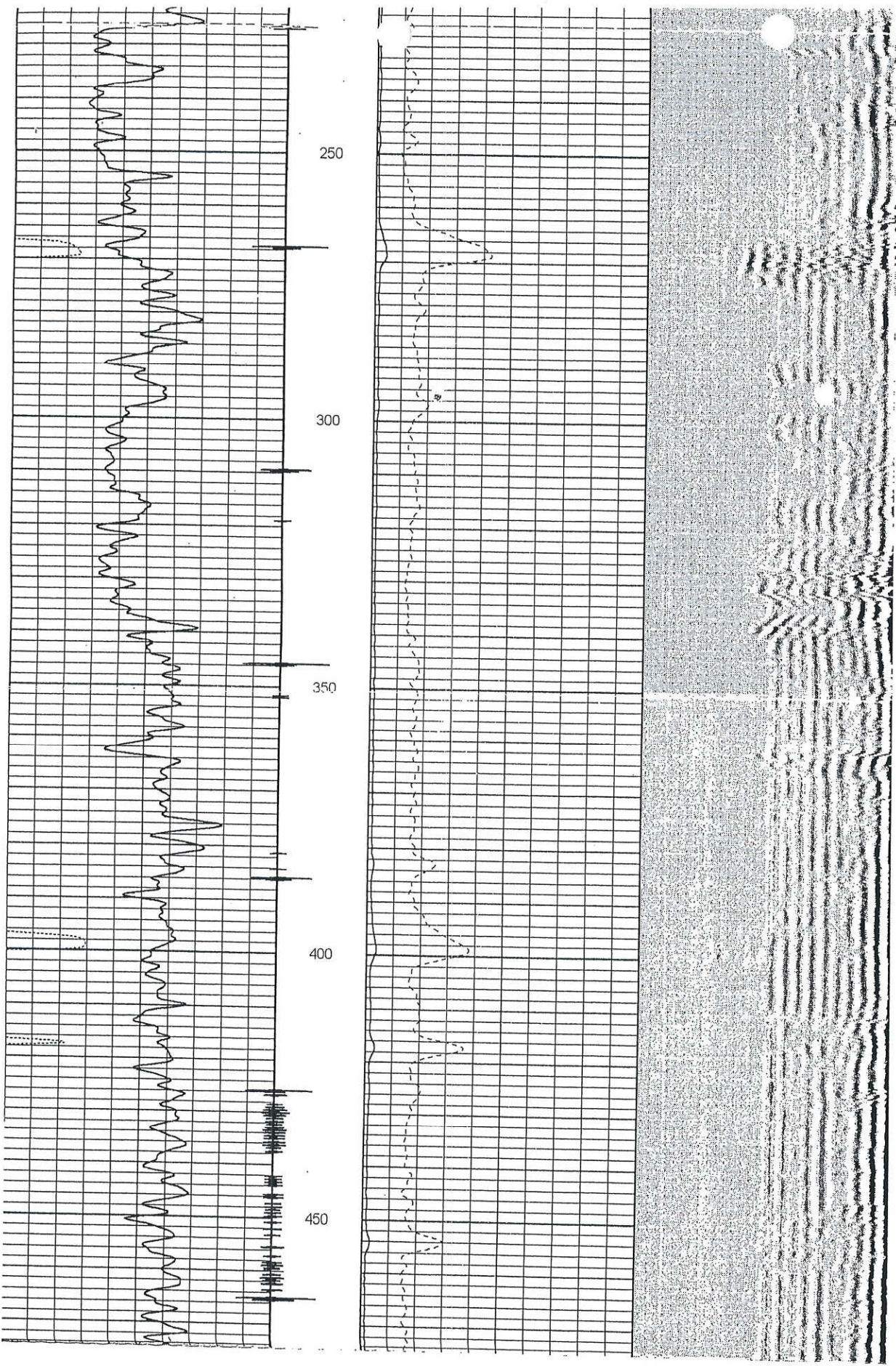
Database File: basic_energy_eunice_#1.db
Dataset Pathname: pass13
Presentation Format: cbj_drs
Dataset Creation: Tue Dec 28 10:39:24 2010 by Log Std Casedhole 07122
Charted by: Depth in Feet scaled 1:240

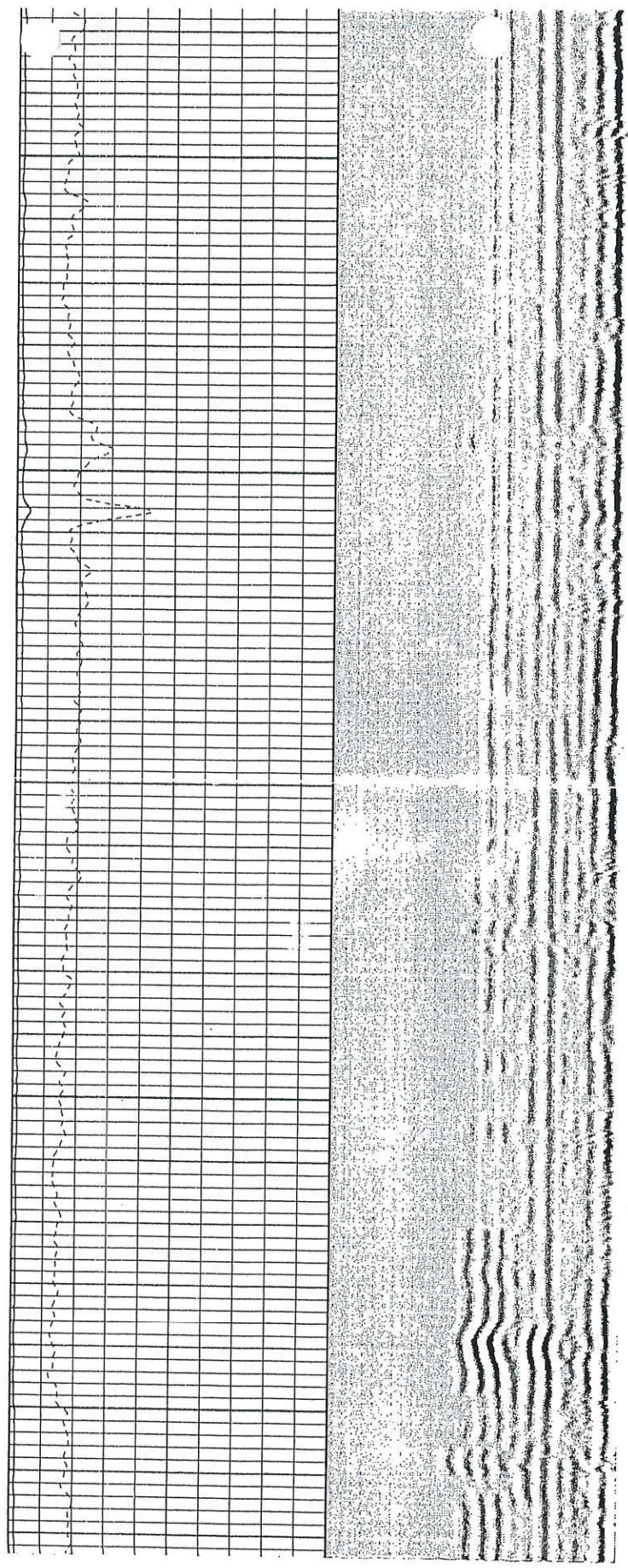
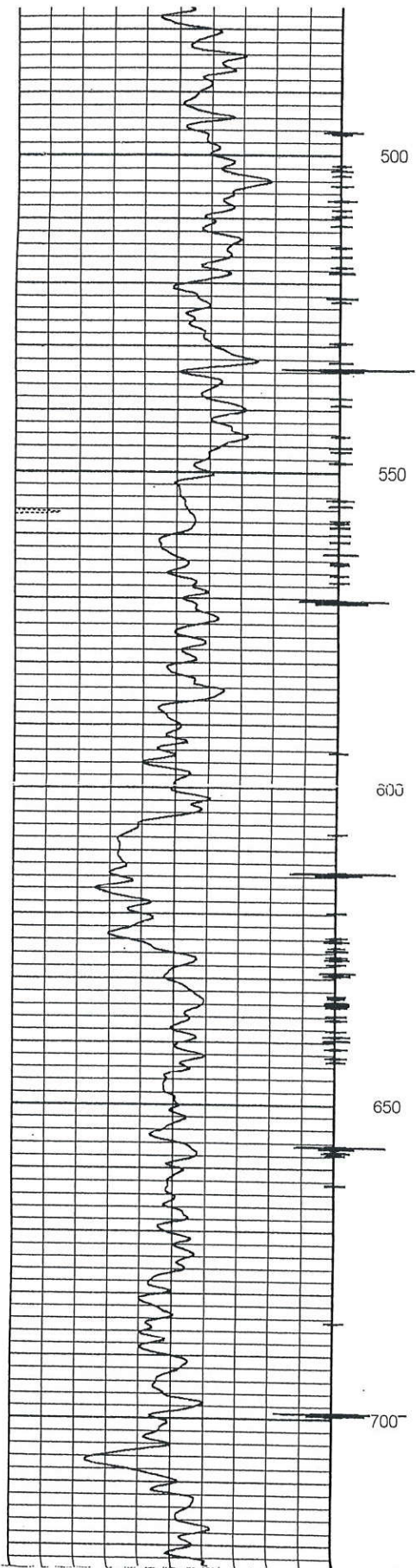
360	TRAVEL TIME (usec)	260
40	Collar Locator	-0.01
0	Gamma Ray (GAPI)	150

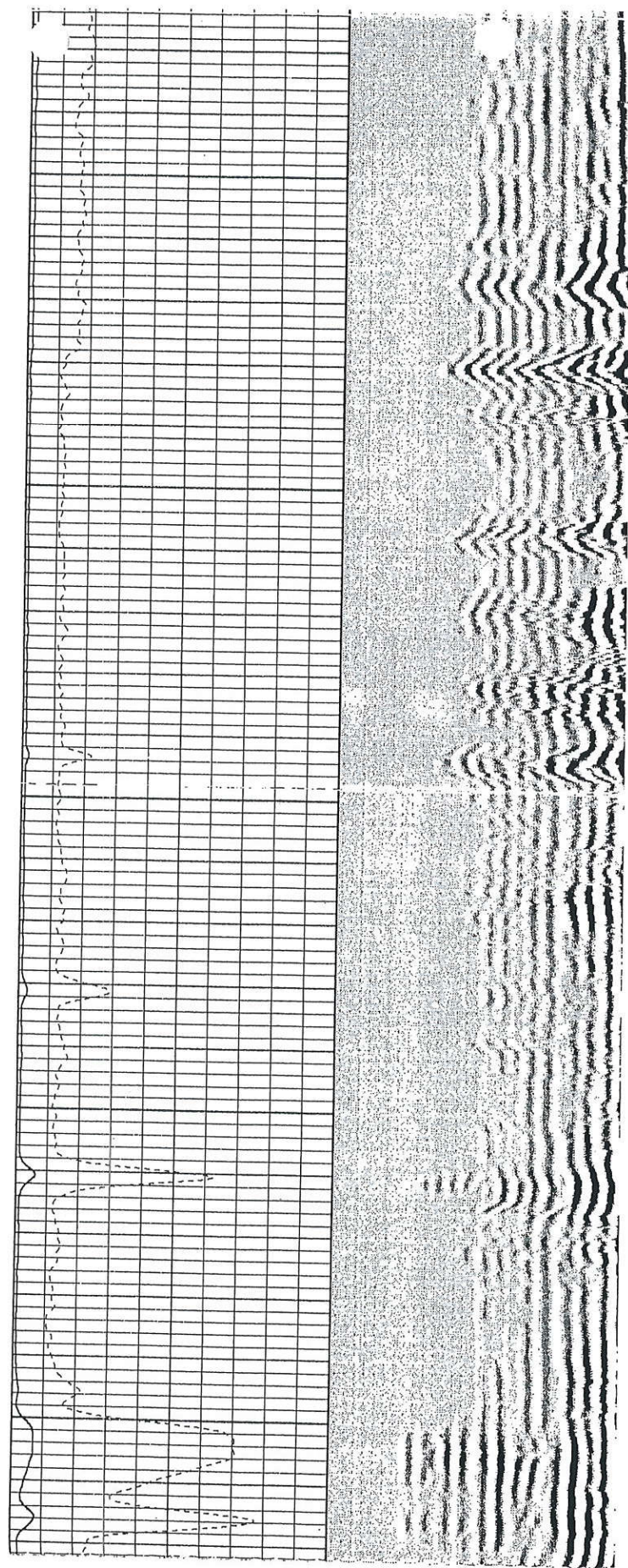
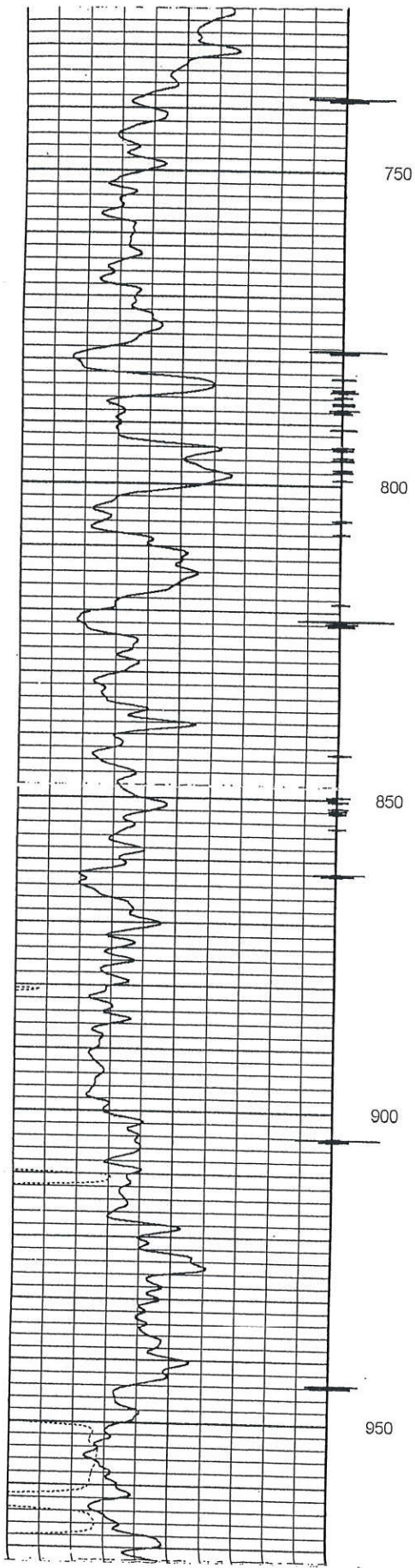
AMP AMPLITUDE (mV)	10	200
AMPLITUDE (mV)	100	

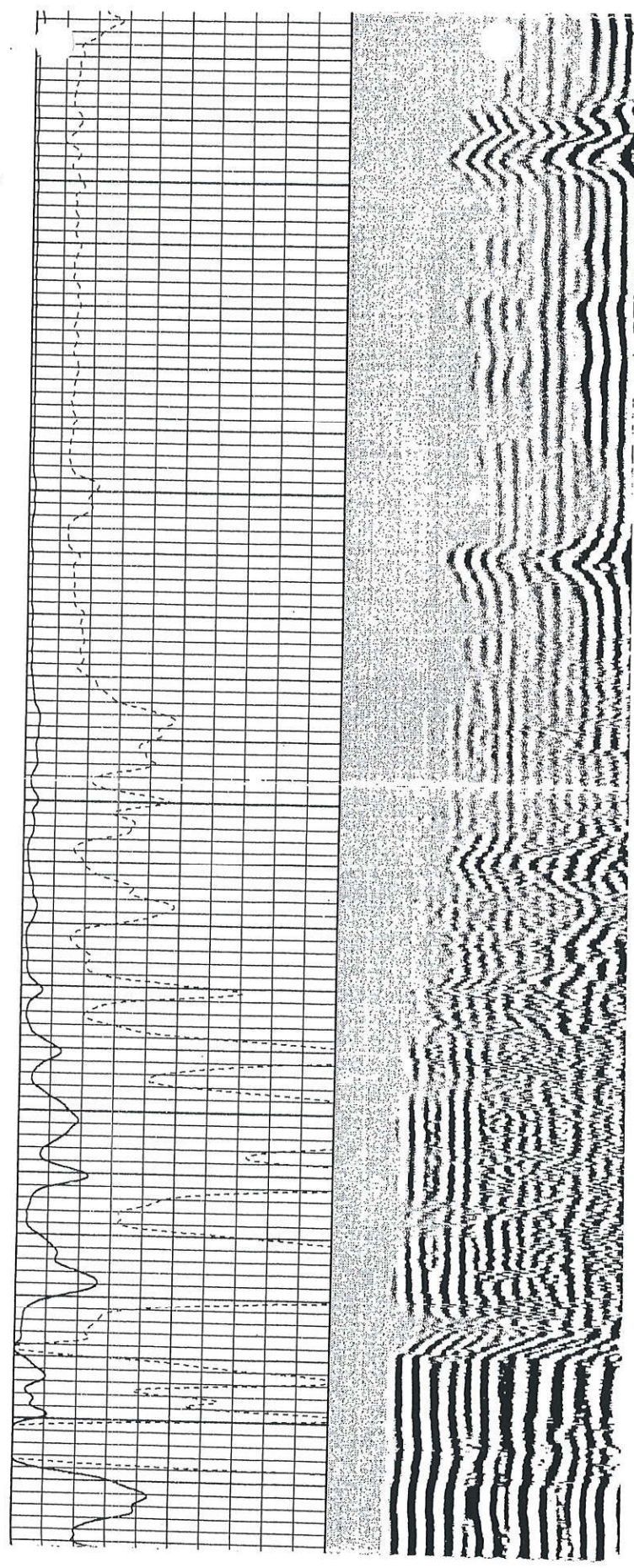
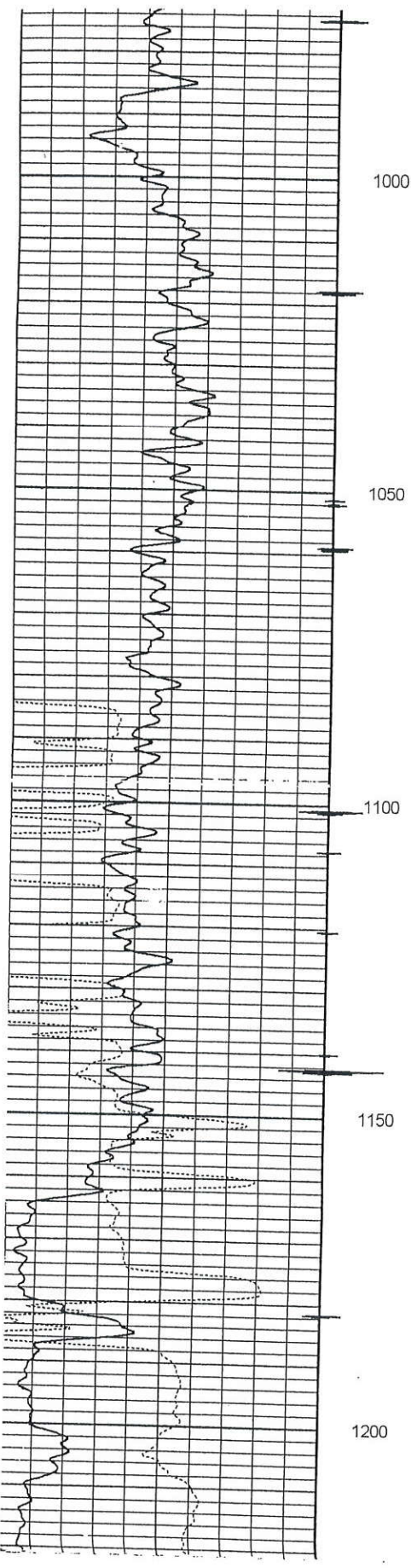
Vari. Density 1

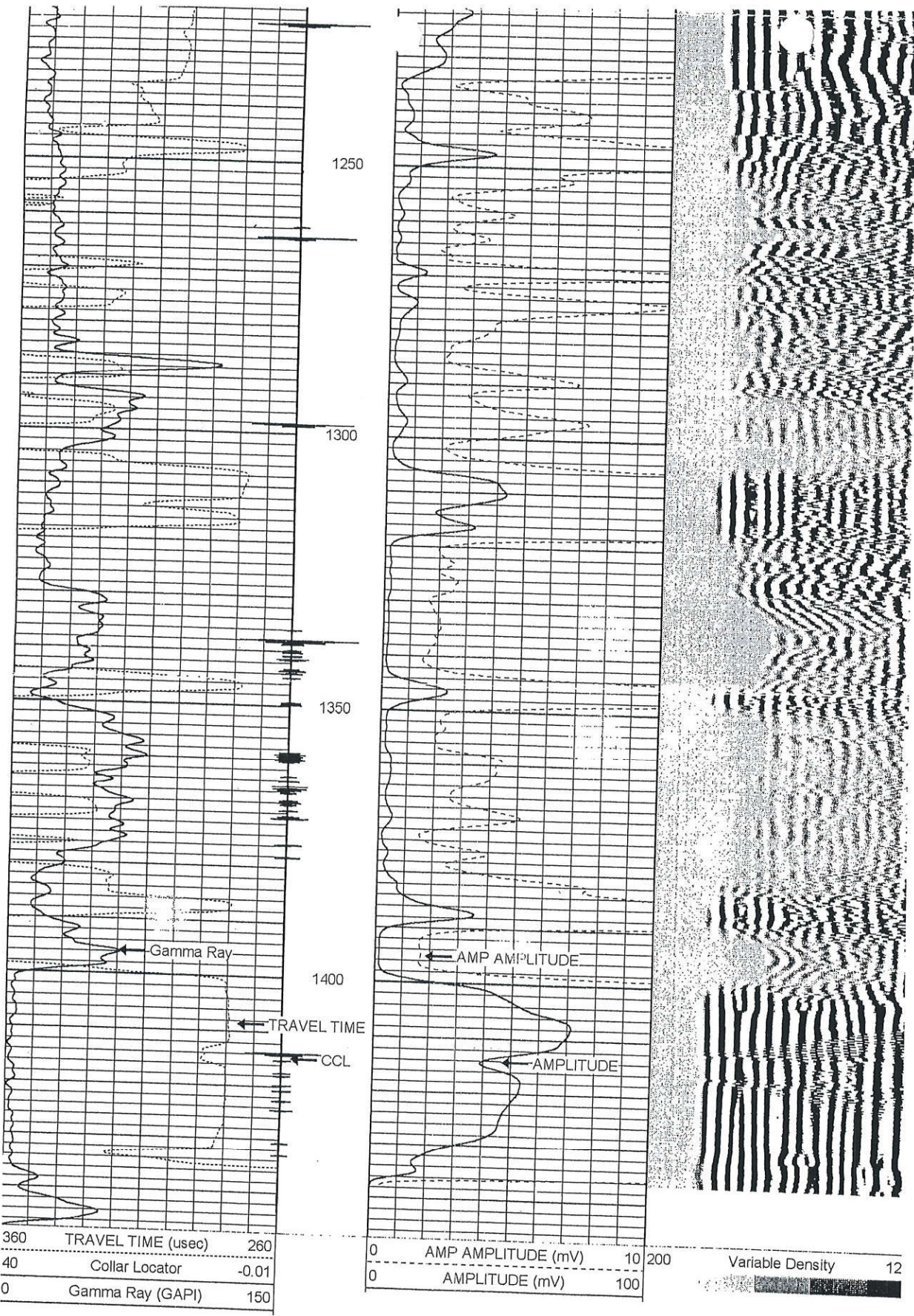












Submit 1 Copy To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Exhibit IX d.

Form C-103
October 13, 2009

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-26884
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Brine <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator BASiC Energy Services L.P.		6. State Oil & Gas Lease No.
3. Address of Operator 801 Cherry Street Ft Worth, TX 76102		7. Lease Name or Unit Agreement Name Eunice No # 001 BW - 002
4. Well Location Unit Letter <u>O</u> : <u>630</u> feet from the <u>South</u> line and <u>2427</u> feet from the <u>East</u> line Section <u>34</u> Township <u>21 S</u> Range <u>37 E</u> NMPM County <u>Lea</u>		8. Well Number # <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number
		10. Pool name or Wildcat Salado

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☒ Salado Formation Test

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Basic Energy Services L.P. has successfully completed the five year MIT requirement.

Please accept our chart with this C-103 of the event that took place on 8/9/16 Starting time at 8:00 am and Finishing at 12:10 pm 8/9/16.

Mark Whitaker was witness to the event.

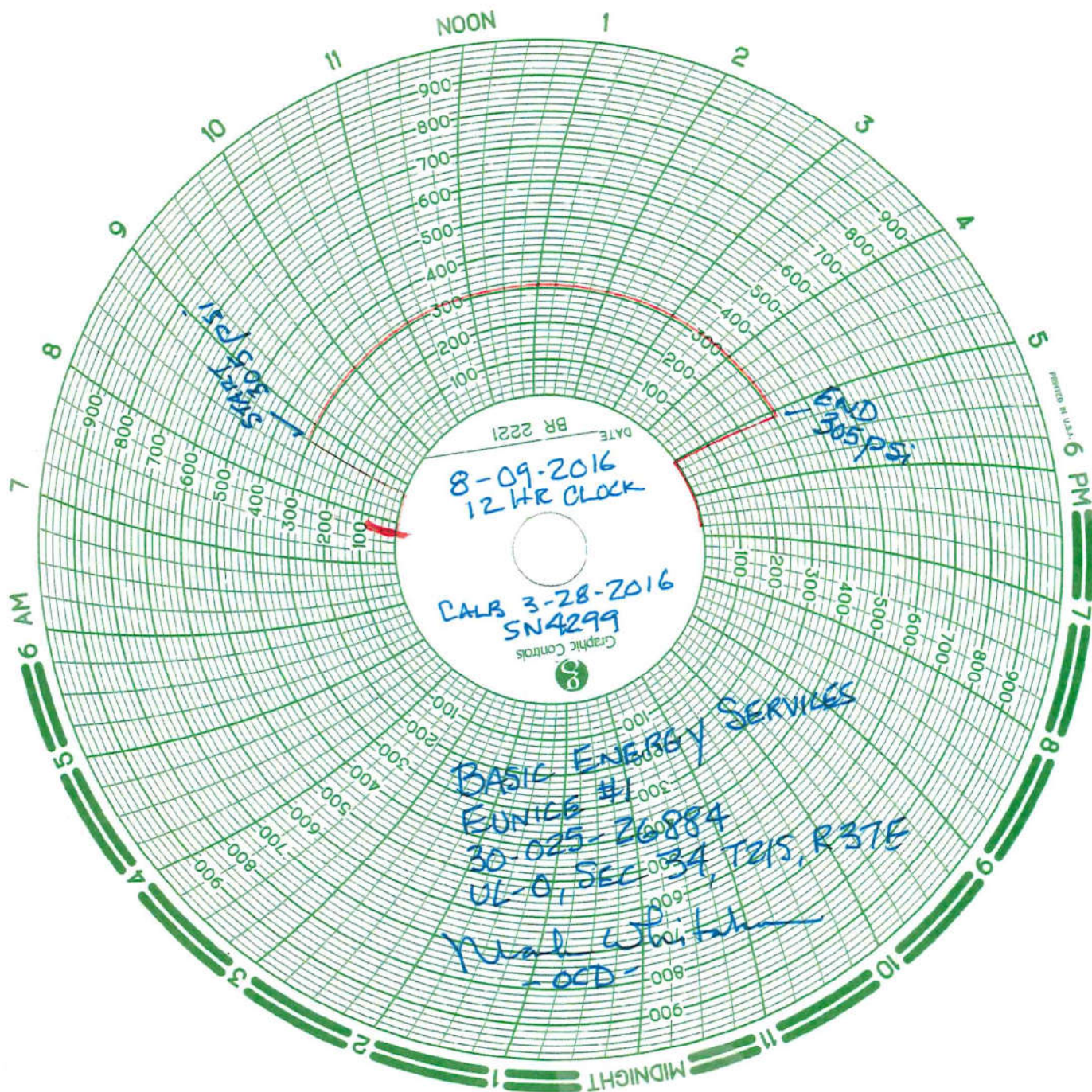
Spud Date:

Rig Release Date:

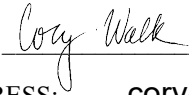
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE David Alvarado TITLE SENM Fluid Sales MGR. DATE 8/9/14
Type or print name DAVID ALVARADO E-mail address: david.alvarado @basicenergyservices.com PHONE: 575.746 2072
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any): _____



APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ Yes ☐ No
- II. OPERATOR: Basic Energy Services L.P.
ADDRESS: 801 Cherry Street, Suite 2100 Fort Worth, TX 76102
CONTACT PARTY: Cory Walk (Permits West Inc.) PHONE: (505) 466-8120
- 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: Cory Walk TITLE: Consultant
SIGNATURE:  DATE: 2/24/2020
E-MAIL ADDRESS: cory@permitswest.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: _____

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.

INJECTION WELL DATA SHEET

OPERATOR: Basic Energy Services LPWELL NAME & NUMBER: Eunice Brine #001

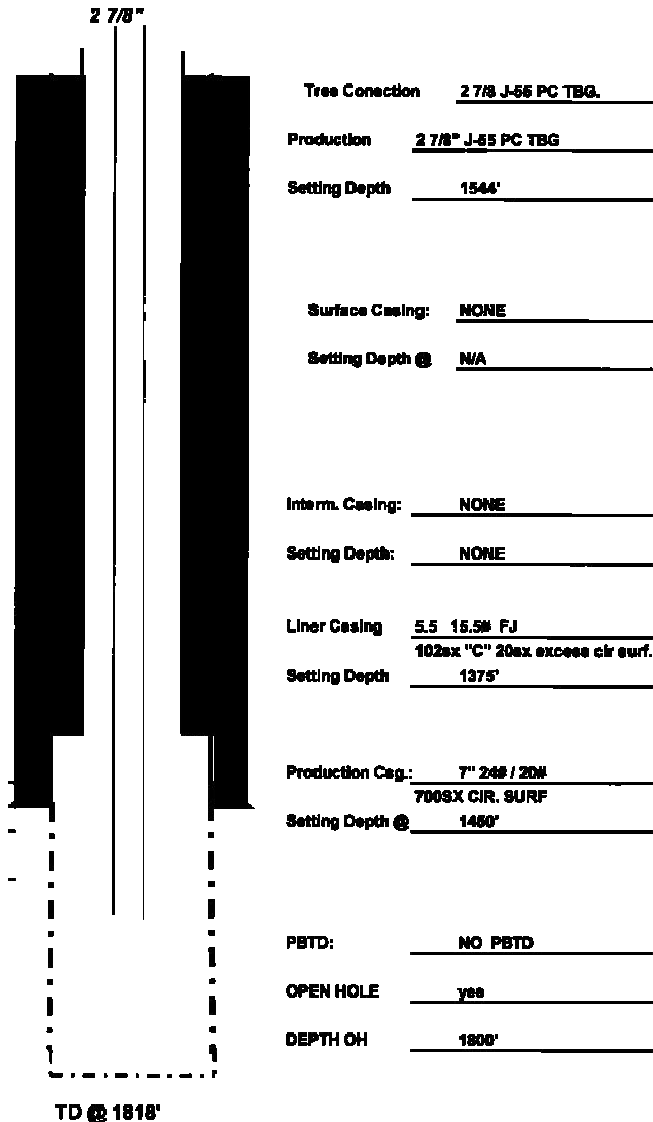
WELL LOCATION:	<u>630 FSL 2427 FEL</u>	<u>O</u>	<u>34</u>	<u>21S</u>	<u>37E</u>
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. **or** _____ ft³

Top of Cement: _____ Method Determined: _____

~~Intermediate Casing~~ LinerHole Size: 8.75" Casing Size: 5.5"Cemented with: 102 sx. **or** _____ ft³Top of Cement: Surface Method Determined: VisualProduction CasingHole Size: 8.75" Casing Size: 7"Cemented with: 700 sx. **or** _____ ft³Top of Cement: Surface Method Determined: VisualTotal Depth: 1,450'Injection Interval 5.5" Open Hole1,450' feet to 1,818'(Perforated or Open Hole indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875" Lining Material: IPCType of Packer: N/APacker Setting Depth: N/AOther Type of Tubing/Casing Seal (if applicable): N/AAdditional Data

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

If no, for what purpose was the well originally drilled? This is a "new" application for a
previously drilled and already in place brine well.

2. Name of the Injection Formation: Salado

3. Name of Field or Pool (if applicable): BSW; Salado [96173]

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

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Yates-7Rivers-Queen (~2,400'), Grayburg (~3,700'),

San Andres (~4,000'), Paddock (~5,100'), Blinberry (~5,560'), and Tubb (~5,900').

Drinkard (~6,380') produced in the past. No oil or gas zone is above the Salado in the
area of review.

I. Goal is to continue to use the 1,818' deep brine supply well. Proposed injection interval will be 1,450' – 1,818' in the BSW; Salado (96173).

II. Operator: Basic Energy Services L.P. [OGRID 246368]
Operator phone number: (432) 571-8159
Operator address: 801 Cherry Street, Suite 2100
Fort Worth, Texas 76102
Contact for Application: Cory Walk (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease name: Fee
Well name and number: Eunice Brine #001
Location: 630' FSL & 2427' FEL Section 34, T. 21 S., R. 37 E.

A. (2) Production casing (7" O.D., 24# / 20#) was set at 1,450' in a 8.75" hole and cemented to surface with 700 sacks.

Liner (5.5" O.D., 15.5#, FJ) was set at 1,375' in a 8.75" hole and cemented to surface with 102 sacks.

An 5.5" open hole was drilled to 1,818'.

A. (3) Tubing will be IPC lined, 2.875", J-55, PC
Setting depth was 1,544'. (Disposal interval will be 1,450' to 1,818'.)

A. (4) N/A

B. (1) Injection zone will be the Salado formation (BSW; Salado (96173) pool).

B. (2) Disposal interval will be open hole from 1,450' to 1,818'.

B. (3) Well was drilled as a brine supply well.

B. (4) No perforated intervals are in the well.

B. (5) Zones currently producing in the area of review below the Salado (1,235') are the Yates-7Rivers-Queen (~2,400'), Grayburg (~3,700'), San Andres (~4,000'), Paddock (~5,100'), Blinbry (~5,560'), Tubb (~5,900'). Drinkard

(~6,380') produced in the past. No oil or gas zone is above the Salado in the area of review.

IV. This is not an expansion of an existing project.

V. See exhibit A for a map showing all wells and leases within two miles of the Eunice Brine well along with a one-half mile radius showing the area of review. Exhibit B shows and tabulates the 36 existing wells (18 oil + 7 gas + 11 P&A) within one-half mile radius. All leases within a half-mile radius are fee or State.

VI. See Exhibit C for a tabulation of data on all wells of public record within the area of review.

- VII. 1. Average injection rate will be \approx 750 bwpd. (based on avg of annual values over past 6 yrs)
Maximum injection rate will be 2,200 bwpd. (based on max monthly value in past 5 yrs)
2. System will be open and closed. Water will both be trucked and piped.
3. Average injection pressure will be \approx 250 psi
Maximum injection pressure will be 400 psi
4. Injected water will be fresh water, from the City of Eunice water line. A summary of water analyses follows.

Injected (Fresh) Water Samples

Parameter	6/2/16	10/27/15	5/24/14	9/12/12	4/22/10
Bicarbonate	185	181	244	220	268
Chloride	57	60	72	59	160
Sulfate	63	82	46	49	200
TDS	424	450	584	459	916

Basic Energy Services has not experienced any compatibility problems when the Eunice Brine #001 was producing.

5. N/A

VIII. The Salado formation is estimated to be 1,165' thick (1,235' – 2,400' based on well completion reports) and is primarily comprised of halite (salt). Closest possible

underground source of drinking water above the proposed injection interval is the Quaternary – Triassic formation near the surface (0' - 668'). No underground source of drinking water is below the proposed disposal interval.

Formation tops are:

Quaternary = 0'
Rustler = 668'
Salado = 1235'
Delaware = 2400'

33 water wells are within a 1-mile radius according to State Engineer records (Exhibit D), deepest of which is 100'. There will be ~567' of low permeability anhydrite and gypsum (Rustler Formation) between the bottom of the only likely underground water source and the top of the Salado.

IX. N/A

X. A CBL was run in December 2010 and submitted in 2011 and is in NMOCD online records.

XI. Many active water wells were found within a mile during a February 1, 2019 field inspection. However, no publicly accessible water wells were found. Several owners of private monitoring wells (Chevron and Versado) were contacted but did not give us permission to sample from their wells nor would they give us recent lab results. Therefore, no water samples were collected. Water samples will be collected, analyzed, and reported to NMOCD as soon as Basic Energy receives permission to install their own monitoring well on the Eunice Brine well pad.

XII. This is not a disposal well; however, available geologic and engineering data has been examined and there is no evidence for an open fault or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Upon acknowledgement by NMOCD of administrative completeness, Basic Energy will put the following public notice plan into place.

- 1) Basic Energy will place the following display ad in both English and Spanish in the Hobbs News-Sun newspaper. The ad will NOT be placed in the classified or legal

advertisements section and will be a minimum of 3 inches by 4 inches in size.

"Basic Energy Services, L.P., 801 Cherry Street, Suite 2100, Fort Worth, TX 76102, has applied for a new discharge permit for the existing Eunice Brine #001 well. The class III brine supply well is located at 630' FSL & 2427' FEL, Sec. 34, T. 21 S., R. 37 E., Lea County, NM. This is just outside of Eunice, NM city limits immediately south of the Desert Oasis RV park on S 4th street. It will inject fresh water into the Salado Formation at an interval between 1,450' and 1,818' below ground surface. The fresh water will brine and then be pumped back to the surface. This brine water will then be used for drilling and completion operations in the oilfield. Maximum injection pressure = 400 psi. Maximum injection rate = 2,200 bwpd. The average depth to groundwater within a 1-mile radius of this location is 43 feet. The NM Oil Conservation Division will accept comments and statements of interest regarding the application and will create a facility-specific mailing list for persons who wish to receive future notices. Interested parties may contact the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505, phone: (505) 476-3441. Additional information can also be obtained by contacting: Cory Walk, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120."

- 2) Basic Energy will post the below synopsis paragraph in both English and Spanish along with a map on a 2 foot by 3 foot board at the entrance of the Eunice Brine well pad along S 4th street.

"PUBLIC NOTICE

Basic Energy Services, L.P., 801 Cherry Street, Suite 2100, Fort Worth, TX 76102, has applied for a new discharge permit for the existing Eunice Brine #001 well directly behind this sign. Basic Energy's previous permit for this well expired in early 2019. The well is presently shut-in and will begin operations again upon approval of this permit.

The class III brine supply well will inject fresh water into the Salado Formation at an interval between 1,450' and 1,818' below ground surface. The fresh water will brine and then be pumped back to the surface. This brine water will then be used for drilling and completion operations in the oilfield. Maximum injection pressure = 400 psi. Maximum injection rate = 2,200 bwpd. The average depth to groundwater within a 1-mile radius of this location is 43 feet. The permit requires that the brine well must be constructed and operated in a manner that will not adversely affect groundwater quality.

The NM Oil Conservation Division will accept comments and statements of interest regarding the application and will create a facility-specific mailing list for persons who wish to receive future notices. Interested parties may contact the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505, phone: (505) 476-3441. Additional information can also be obtained by contacting: Cory Walk, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120."

- 3) Basic Energy will post a second notice off-site on the Eunice Public Library bulletin board (if permitted) or at another location designated by the NMOCD.

"PUBLIC NOTICE

Basic Energy Services, L.P., 801 Cherry Street, Suite 2100, Fort Worth, TX 76102, has applied for a new discharge permit for the existing Eunice Brine #001 well. Basic Energy's previous permit for this well expired in early 2019. The well is presently shut-in and will begin operations again upon approval of this permit.

The class III brine supply well is located at 630' FSL & 2427' FEL, Sec. 34, T. 21 S., R. 37 E., Lea County, NM. A map is hereby attached to the bottom of this posting. This is just outside of Eunice, NM city limits immediately south of the Desert Oasis RV park on S 4th street. It will inject fresh water into the Salado Formation at an interval between 1,450' and 1,818' below ground surface. The fresh water will brine and then be pumped back to the surface. This brine water will then be used for drilling and completion operations in the oilfield. Maximum injection pressure = 400 psi. Maximum injection rate = 2,200 bwpd. The average depth to groundwater within a 1-mile radius of this location is 43 feet. The permit requires that the brine well must be constructed and operated in a manner that will not adversely affect groundwater quality.

The NM Oil Conservation Division will accept comments and statements of interest regarding the application and will create a facility-specific mailing list for persons who wish to receive future notices. Interested parties may contact the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505, phone: (505) 476-3441. Additional information can also be obtained by contacting: Cory Walk, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120."

- 4) The following notice will be sent by certified mail to all owners of record of all properties within a 1/3-mile distance from the well site location.

"PUBLIC NOTICE

Dear surface owner:

Basic Energy Services, L.P., 801 Cherry Street, Suite 2100, Fort Worth, TX 76102, has applied for a new discharge permit for the existing Eunice Brine #001 well. Basic Energy's previous permit for this well expired in early 2019. The well is presently shut-in and will begin operations again upon approval of this permit. As required by Water Quality Control Commission Regulations 20.6.2.3108.B.2 NMAC, I am notifying you of this application as you are a property owner of record within a 1/3 mile radius of the brine well location. This letter is a notice only. No action is needed unless you have questions or objections.

The class III brine supply well is located at 630' FSL & 2427' FEL, Sec. 34, T. 21 S., R. 37 E., Lea County, NM. A map is included within this mailing. The well is just outside of Eunice, NM city limits immediately south of the Desert Oasis RV park on S 4th street. It will inject fresh water into the Salado Formation at an interval between 1,450' and 1,818' below ground surface. The fresh water will brine and then be pumped back to the surface. This brine water will then be used for drilling and completion operations in the oilfield. Maximum injection pressure = 400 psi. Maximum injection rate = 2,200 bwpd. The average depth to groundwater within a 1-mile radius of this location is 43 feet. The permit requires that the brine well must be constructed and operated in a manner that will not adversely affect groundwater quality.

The NM Oil Conservation Division will accept comments and statements of interest regarding the application and will create a facility-specific mailing list for persons who wish to receive future notices. Interested parties may contact the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505, phone: (505) 476-3441. Additional information can also be obtained by contacting: Cory Walk, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.

Sincerely,

Cory Walk"

BASIC ENERGY SERVICES L.P.
EUNICE BRINE #001
630' FSL & 2427' FEL
SEC. 34, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 7

30-025-26884

- 5) Within 15 days of completion of the public notice plan, Basic Energy will submit proof of notice and proof of publication to the NMOCD.

Basic Energy Services L.P.

Eunice Brine Well #1 Well & Lease Map

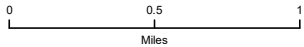
630' FSL & 2427' FEL
Sec. 34, Township 21S, Range 37E
Lea County, New Mexico

★ Eunice Brine Well #1

State Leases

Federal Leases

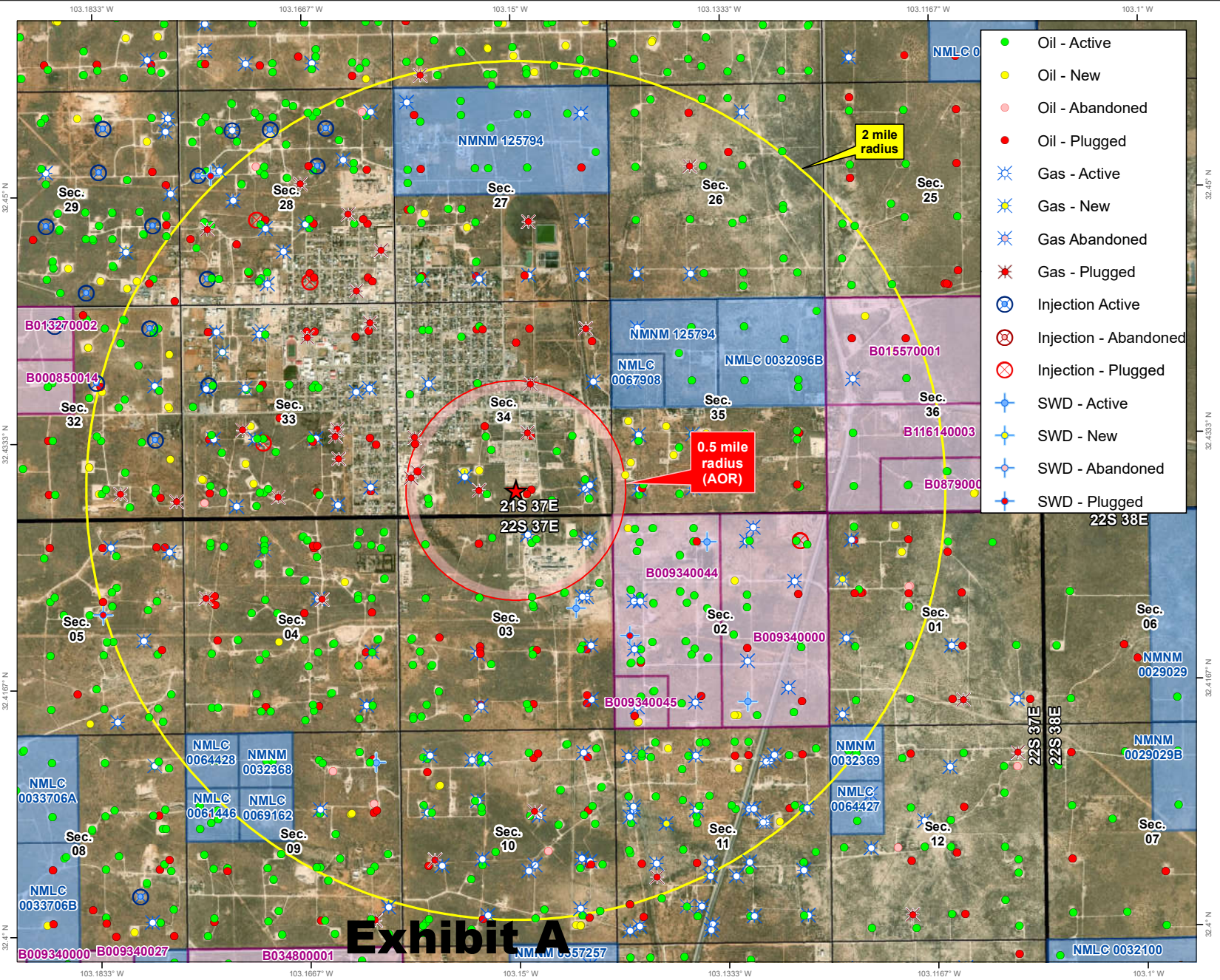
1:27,000



NAD 1983 New Mexico State Plane East
FIPS 3001 Feet



Prepared by Permits West, Inc., February 12, 2020
for Basic Energy Services L.P.



API	OPERATOR	WELL	TYPE	UNIT-SECTION	TVD	ZONE	FEET FROM EUNICE #1
3002507005	Chevron	Mark Owen 006H	O	O-34	3831	Penrose Skelly; Grayburg	290
3002507002	Gulf Oil	Mark Owen 002	O	O-34	3740	Penrose Skelly	382
3002534774	Apache	Owen B 008	P&A	N-34	4050	Penrose Skelly; Grayburg	720
3002506999	Apache	Owen B 004	G	N-34	6599	Blaine Oil; Gas (Pro Gas)	916
3002537186	Chevron	Mark Owen 010	P&A	O-34	4323	Penrose Skelly; Grayburg	918
3002540099	Apache	Owen B 014	O	N-34	7319	Tubb Oil and Gas	1019
3002509991	SMC	Mark 002H	G	2-3	3839	Penrose Skelly; Grayburg	1133
3002534554	Apache	Owen B 007	O	K-34	3950	Penrose Skelly; Grayburg	1163
3002509998	SMC	Mark 008	O	2-3	7693	Blaine Oil and Gas (Oil)	1294
3002510001	John H Hendrix	Eva Owen 003	O	3-3	6590	Penrose Skelly; Grayburg	1294
3002537322	Apache	Owen B 011	G	N-34	4600	Penrose Skelly; Grayburg	1294
3002539732	Apache	Owen B 013	O	N-34	7540	Wantz; Abo; Granite Wash	1343
3002509979	SMC	Mark 001	O	2-3	3860	Penrose Skelly; Grayburg	1359
3002507001	Chevron	Mark Owen 001	P&A	J-34	3735	Penrose Skelly; Grayburg	1389
3002537189	Chevron	Mark Owen 009	O	J-34	4320	Penrose Skelly; Grayburg	1394
3002535705	McCasland	Pioneer 001	P&A	J-34	No report	Salt	1413
3002507003	Chevron	Mark Owen 004	P&A	J-34	6584	Blaine Oil; Gas (Pro Gas)	1453
3002534321	Apache	Owen B 006	O	K-34	7500	Drinkard	1515
3002510000	Sunray Oil Co DX	OwenS 002	P&A	3-3	5255	Penrose Skelly	1595
3002507004	Chevron	Mark Owen 005	G	P-34	6545	Blaine Oil; Gas (Pro Gas)	1708
3002526053	Chevron	Mark Owen 008	O	P-34	7610	Penrose Skelly; Grayburg	1727
3002506998	BP America	Owen B 003	P&A	K-34	6911	Drinkard	1757

Exhibit B

API	OPERATOR	WELL	TYPE	UNIT-SECTION	TVD	ZONE	FEET FROM EUNICE #1
3002526051	SMC	Mark 011	O	1-3	7618	Penrose Skelly; Grayburg	1770
3002538333	Chevron	Mark Owen 011H	O	P-34	3833	Penrose Skelly; Grayburg	1812
3002507006	John H Hendrix	Paddock Unit 002	G	P-34	5180	Paddock	1819
3002507022	Chevron	Mark Owen 003	O	I-34	6550	Penrose Skelly; Grayburg	1939
3002510049	SMC	Mark 005	G	1-3	6521	Tubb Oil and Gas (Oil)	2149
3002534775	Apache	Owen B 009	O	M-34	4150	Eunice; San Andres	2158
3002537239	Apache	Owen B 012	O	M-34	7200	Blinebry Oil and Gas (Oil)	2165
3002509994	John H Hendrix	Paddock Unit 009	G	1-3	5240	Paddock	2175
3002535638	Apache	Owen B 010	P&A	M-34	5900	Blinebry Oil and Gas (Oil)	2458
3002509999	John H Hendrix	Eva Owen 001	O	4-3	7370	Penrose Skelly; Grayburg	2595
3002506996	Apache	Owen B 001	P&A	M-34	6614	Blinebry Oil and Gas (Oil)	2597
3002507010	XTO	F F Hardison B 003	P&A	G-34	6707	Blinebry Oil and Gas (Oil)	2645
3002509995	SMC	Mark 003H	O	G-3	3835	Penrose Skelly; Grayburg	2652
3002507007	J C Clower	Hardison 001	P&A	G-34	3730	Hardy	2680
3002539827	Apache	Mark Owen 020	O	M-35	4400	Penrose Skelly; Grayburg	2721

Exhibit B

Sorted by distance from Basic Eunice 1

WELL	SPUD	TVD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
Mark Owen 006H	9/24/1947	3831	Penrose Skelly; Grayburg	O	17.5	13.375	309	300 sx	Surface	Circ
3002507005					12.25	9.625	2900	1300 sx	1600	Temp survey
O-34-21S-37E					8.75	7	6301	700 sx	2830	Temp survey
Mark Owen 002	5/5/1940	3740	Penrose Skelly	P&A	13.75	9.625	251	200 sx	Surface	Circ
3002507002					7.875	6	3575	300 sx	No report	No report
O-34-21S-37E										
Owen B 008	12/7/1999	4050	Penrose Skelly; Grayburg	O	12.25	8.625	1103	435 sx	Surface	Circ 89 sx
3002534774					7.875	5.5	4050	625 sx	Surface	Circ 38 sx
N-34-21S-37E										
Owen B 004	1/2/1947	6599	Blincbry Oil & Gas (Pro Gas) Drinkard	P&A	8	7	3568	250 sx	342	Calc
3002506999					6.25	5	6599	160 sx	4397	Calc
N-34-21S-37E										

Exhibit C

Sorted by distance from Basic Eunice 1

Mark Owen 010	10/8/2005	4323	Penrose Skelly; Grayburg	O	11	8.625	442	550 sx	Surface	Circ 216 sx
3002537186					7.875	5.5	4217	1000 sx	Surface	Circ 70 sx
O-34-21S-37E										
Owen B 014	4/29/2011	7319	Tubb Oil and Gas	O	12.25	8.625	1253	650 sx	Surface	Circ 64 sx
3002540099					7.875	5.5	7319	1200 sx	Surface	Circ 180 sx
N-34-21S-37E										
Mark 002H	10/19/1946	3839	Penrose Skelly; Grayburg	G	17.25	13.375	294	300 sx	Surface	Circ
3002509991					12.25	9.625	2906	1300 sx	No report	No report
B-3-22S-37E					8.75	7	6483	700 sx	No report	No report
Owen B 007	3/20/1999	3950	Penrose Skelly; Grayburg	O	12.25	8.625	1047	450 sx	Surface	Circ 98 sx
3002534554					7.875	5.5	3950	980 sx	Surface	Circ 89 sx
K-34-21S-37E										
Mark 008	3/31/1949	7693	Blinebry Oil and Gas (Oil)	O	17.25	13.375	304	300 sx	Surface	Circ

Exhibit C

Sorted by distance from Basic Eunice 1

3002509998					12.25	9.625	2900	2900 sx	1300	No report
B-3-22S-37E					8.75	7	5290	500 sx	2015	No report
Eva Owen 003	8/9/1946	6590	Penrose Skelly; Grayburg	O	17.25	13.375	338	250 sx	Surface	Circ
3002510001					12.25	9.625	2830	2200 sx	Surface	Circ
C-3-22S-37E					8.75	7	6589	300 sx	No report	No report
Owen B 011	10/2/2005	4600	Penrose Skelly; Grayburg	G	12.25	8.625	400	290 sx	Surface	Circ sx
3002537322					7.875	5.5	4600	1050 xs	180	CBL
N-34-21S-37E										
Owen B 013	5/1/2010	7540	Wantz; Abo; Granite Wash	O	12.25	8.625	1190	650 sx	203	CBL
3002539732					7.875	5.5	7621	1400 sx	No report	No report
N-34-21S-37E										
Mark 001	6/28/1940	3860	Penrose Skelly; Grayburg	O	13.75	9.625	251	250 sx	Surface	Circ
3002509979					6.75	5.5	3574	200 sx	No report	No report

Exhibit C

Sorted by distance from Basic Eunice 1

B-3-22S-37E										
Mark Owen 001	10/20/1939	3735	Penrose Skelly; Grayburg	P&A	13.75	10.75	260	225 sx	Surface	Circ
3002507001					7.875	6	3600	350 sx	1601	Calc
J-34-21S-37E										
Mark Owen 009	10/2/2005	4320	Penrose Skelly; Grayburg	O	11	8.625	451	650 sx	Surface	Circ 280 sx
3002537189					7.875	5.5	4312	1000 sx	Surface	Circ 261 sx
J-34-21S-37E										
Pioneer 001	No report	No report	Salt	P&A	No report	No report	No report	No report	No report	No report
3002535705										
J-34-21S-37E										
Mark Owen 004	6/19/1946	6584	Blinebry Oil; Gas (Pro Gas)	P&A	17.5	13.375	308	300 sx	Surface	Circ
3002507003					12.5	9.625	2900	1300 sx	505	Temp survey
J-34-21S-37E					8.75	7	6500	700 sx	2910	Temp survey

Exhibit C

Sorted by distance from Basic Eunice 1

Owen B 006	3/31/1998	7500	Drinkard	O	12.25	9.625	1030	415 sx	Surface	Circ 109 sx
3002534321					7.875	5.5	5487	2100 sx	1380	Temp survey
K-34-21S-37E					5.5	4.5	5277-7500	585 sx	5277	No report
OwenS 002	5/21/1940	5255	Penrose Skelly	P&A	16	15	120	100 sx	Surface	Circ
3002510000					8	7	3554	300 sx	No report	No report
C-3-22S-37E					6.25	5	5254	250 sx	No report	No report
Mark Owen 005	12/10/1974	6545	Blinebry Oil; Gas (Pro Gas)	G	17.25	13.375	293	300 sx	Surface	Circ
3002507004					12.25	9.625	2900	1300 sx	1570	Temp survey
P-34-21S-37E					8.75	7	6545	700 sx	2055	Temp survey
Mark Owen 008	9/27/1978	7610	Penrose Skelly; Grayburg	O	12.25	8.625	1137	550 sx	Surface	Circ
3002526053					7.875	5.5	7610	1915 sx	Surface	Circ
P-34-21S-37E										

Exhibit C

Sorted by distance from Basic Eunice 1

Owen B 003	7/3/1939	6911	Drinkard	P&A	18	15.5	133	100 sx	Surface	Circ
3002506998					8	7	3625	150 sx	No report	No report
K-34-21S-37E										
Mark 011	8/16/1978	7618	Penrose Skelly; Bliebry; Wantz Abo	O	12.25	8.625	1143	550 sx	Surface	Circ
3002526051					7.875	5.5	7618	1875 sx	Surface	Circ
A-3-22S-37E										
Mark Owen 011H	3/30/2007	3833	Penrose Skelly; Grayburg	O	12.25	9.625	486	380 sx	Surface	Circ 145 sx
3002538333					8.75	7	4050	1075 sx	Surface	Circ 313 sx
P-34-21S-37E					6.125	4.5	4824	120 sx	Surface	Circ 4 bbl
Paddock Unit 002	11/25/1947	5180	Paddock	G	17.5	13.375	290	300 sx	Surface	Circ
3002507006					12.25	9.625	2900	1300 sx	1820	Temp survey
P-34-21S-37E					8.75	7	5065	500 sx	No report	No report
Mark Owen 003	4/13/1946	6550	Penrose Skelly; Grayburg	O	17.5	13.375	395	300 sx	Surface	Circ

Exhibit C

Sorted by distance from Basic Eunice 1

3002507022					12.25	9.625	2850	1300 sx	1530	Temp survey
I-34-21S-37E					8.75	7	6434	700 sx	2830	Temp survey
Mark 005	6/8/1947	6521	Tubb Oil and Gas (Oil)	G	17.25	13.375	300	300 sx	Surface	Circ
3002510049					12.25	9.625	2900	1300 sx	1435	Temp survey
A-3-22S-37E					8.75	7	6455	700 sx	2945	Temp survey
Owen B 009	12/16/1999	4150	Eunice; San Andres	O	12.25	8.625	1092	460 sx	Surface	Circ
3002534775					7.875	5.5	4150	830 sx	100	CBL
M-34-21S-37E										
Owen B 012	8/16/2005	7200	Blinbry Oil and Gas (Oil)	O	12.25	8.625	1195	575 sx	Surface	Circ
3002537239					7.875	5.5	7200	1545 sx	1090	CBL
M-34-21S-37E										
Paddock Unit 009	10/10/1947	5240	Paddock	G	17.5	13.375	297	300 sx	Surface	Circ
3002509994					12.25	9.625	2900	1300 sx	No report	No report

Exhibit C

Sorted by distance from Basic Eunice 1

A-3-22S-37E					8.75	7	5240	500 sx	1645	Temp survey
Owen B 010	9/9/2001	5900	Blinebry Oil and Gas (Oil)	P&A	12.25	8.625	1130	460 sx	Surface	Circ 43 sx
3002535638					7.875	5.5	6036	1500 sx	Surface	Circ 157 sx
M-34-21S-37E										
Eva Owen 001	6/17/1937	7370	Penrose Skelly; Grayburg	O	15	13.375	291	300 sx	Surface	Circ
3002509999					12.5	9.625	1174	225 sx	Surface	Circ
D-3-22S-37E					8.625	7	3592	400 sx	No report	No report
					No report	5	6599	250 sx	3300	Temp survey
Owen B 001	1/8/1947	6614	Blinebry Oil and Gas (Oil)	P&A	18	15.5	130	100 sx	Surface	Circ
3002506996					8	7	3825	150 sx	1689	Cal
M-34-21S-37E					6.25	5	6614	160 sx	4412	Cal
F F Hardison B 003	12/3/1990	6707	Blinebry Oil and Gas (Oil)	P&A	13.75	10.75	368	350 sx	Surface	Circ
3002507010					8.625	7.625	2822	1650 sx	Surface	Circ

Exhibit C

Sorted by distance from Basic Eunice 1

G-34-21S-37E					6.75	5.5	6607	400 sx	1890	Temp survey
Mark 003H	2/26/1947	3835	Penrose Skelly; Grayburg	O	17.25	13.375	296	300 sx	Surface	Circ
3002509995					12.25	9.625	2800	1300 sx	1150	Temp survey
G-3-22S-37E					8.75	7	6390	700 sx	2745	Temp survey
Hardison 001	5/14/1939	3730	Hardy	P&A	12.25	9.625	446	200 sx	Surface	Circ
3002507007					8.75	7	3621	400 sx	No report	No report
G-34-21S-37E										
Mark Owen 020	8/26/2010	4400	Penrose Skelly; Grayburg	O	12.25	8.625	1211	675 sx	Surface	Circ 202 sx
3002539827					8.875	5.5	4396	625 sx	Surface	Circ 163 sx
M-35-21S-37E										

Exhibit C



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01358 POD7	CP	LE		3	3	4	34	21S	37E	673970	3589556	46	95	86	9
CP 01358 POD1	CP	LE		2	1	4	34	21S	37E	674134	3589539	202	65	48	17
CP 01358 POD10	CP	LE		3	4	4	34	21S	37E	674313	3589482	390	65	60	5
CP 01358 POD6	CP	LE		4	3	4	34	21S	37E	674271	3589921	469	26		
CP 00835	CP	LE				3	34	21S	37E	673454	3589786*	521	145		
CP 01358 POD3	CP	LE		2	4	4	34	21S	37E	674434	3589782	531	45	32	13
CP 01358 POD4	CP	LE		2	4	4	34	21S	37E	674307	3589974	532	45	40	5
CP 01358 POD2	CP	LE		3	2	4	34	21S	37E	674497	3589676	566	42	29	13
CP 01358 POD5	CP	LE		3	4	4	34	21S	37E	674306	3590035	577	58	41	17
CP 01159 POD1	CP	LE				2	03	22S	37E	674217	3589009	644	45		
CP 01159 POD2	CP	LE				2	03	22S	37E	674223	3588982	671	40		
CP 01159 POD3	CP	LE				2	03	22S	37E	674266	3588993	681	40		
CP 01159 POD4	CP	LE				2	03	22S	37E	674279	3588986	694	40		
CP 01623 POD1	CP	LE		3	2	2	03	22S	37E	674368	3589021	713	43	30	13
CP 01623 POD6	CP	LE		3	2	2	03	22S	37E	674371	3589021	715	43	28	15
CP 01623 POD2	CP	LE		1	4	2	03	22S	37E	674369	3589003	728	41	30	11
CP 01623 POD5	CP	LE		1	4	2	03	22S	37E	674364	3588981	743	42	31	11
CP 01623 POD3	CP	LE		4	4	4	28	21S	37E	674384	3588994	745	42	29	13
CP 01623 POD4	CP	LE		1	4	2	03	22S	37E	674385	3588978	757	43	27	16
CP 01103 POD1	CP	LE				2	03	22S	37E	674447	3589016	768	40		
CP 01103 POD7	CP	LE				2	03	22S	37E	674489	3589046	774	40		
CP 01103 POD2	CP	LE				2	03	22S	37E	674439	3588991	781	40		
CP 01103 POD3	CP	LE				2	03	22S	37E	674465	3588991	798	40		
CP 01103 POD6	CP	LE				2	03	22S	37E	674501	3589002	814	40		
CP 01103 POD4	CP	LE				2	03	22S	37E	674468	3588968	817	40		
CP 01103 POD8	CP	LE				2	03	22S	37E	674520	3589016	817	40		

*UTM location was derived from PLSS - see Help

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01103 POD5	CP	LE		2	03	22S	37E			674488	3588977	823	40		
CP 01103 POD9	CP	LE		2	03	22S	37E			674533	3588980	852	35		
CP 01103 POD10	CP	LE		2	03	22S	37E			674552	3588995	855	32		
CP 00943 POD1	CP	LE	1	3	1	34	21S	37E		673166	3590405	1122	142		
CP 00221 POD1	CP	LE	2	1	3	35	21S	37E		674953	3590115*	1142	290		
CP 00726	CP	LE		2	4	33	21S	37E		672844	3589980*	1160	125	100	25
CP 01540 POD1	CP	LE	1	1	1	35	21S	37E		674676	3590844	1455	51	36	15

Average Depth to Water: **43 feet**

Minimum Depth: **27 feet**

Maximum Depth: **100 feet**

Record Count: 33

UTMNAD83 Radius Search (in meters):

Easting (X): 673937.71

Northing (Y): 3589590.78

Radius: 1610

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/30/19 4:03 PM

Page 2 of 2

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Exhibit D