

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -



30-025-25518
Bebidas 16 state
SWD #1

RECEIVED OGD

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

2013 MAR 21

ADMINISTRATIVE APPLICATION CHECKLIST

COG operating

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

Application Acronyms:

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

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

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

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

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

BRIAN COLLINS
Print or Type Name

Signature

Brian Collins

SENIOR OPERATIONS ENGINEER
Title

Date

15 Mar 2013

bcollins@concho.com
e-mail Address

SWD - 1412

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: _____ COG OPERATING LLC _____

ADDRESS: _____ 2208 W. Main Street, ARTESIA, NM 88210 _____

CONTACT PARTY: _____ BRIAN COLLINS _____ PHONE: _____ 575-748-6940 _____

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 _____ X _____ 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: _____ BRIAN COLLINS _____ TITLE: _____ Senior Operations Engineer _____

SIGNATURE: _____  _____ DATE: _____ 15 Mar 2013 _____

E-MAIL ADDRESS: _____ bcollins@concho.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: _____

C-108 Application for Authorization to Inject
BEBIDAS 16 STATE SWD #1
1980' FSL, 660' FWL
Unit L, Sec 16 T23S R33E
Lea County, NM
API 30-025-25518

COG Operating, LLC, proposes to reenter the captioned well, clean out to 7550', set a CIBP at 7550', perforate the Delaware Sand from 5160' to 7350' and put well into SWD service. A drilling permit will be submitted upon approval of this C-108.

- V. Map is attached.
- VI. No wells within the ½ mile radius area of review penetrate the proposed injection zone. We plan to drill the Bebidas State 1H and 2H within the AOR. Proposed wellbore schematics are attached.
- VII.
 1. Proposed average daily injection rate = 5000 BWPD
Proposed maximum daily injection rate = 10000 BWPD
 2. Closed system
 3. Proposed maximum injection pressure = 1032 psi
(0.2 psi/ft. x 5160' ft.)
 4. Source of injected water will be Delaware Sand and Bone Spring Sand produced water. No compatibility problems are expected. Analyses of Delaware and Bone Spring waters from analogous source wells are attached.
- VIII. The injection zone is the Delaware Sandstone, a fine-grained sandstone from 5160' to 7350'. Any underground water sources will be shallower than 1300' (surface casing setting depth for new wells).
- IX. The Delaware sand injection interval might be acidized with approximately 20 gal/ft of 7 ½ % HCl acid and possibly fraced with approximately 200,000 lbs of sand.
- X. Well logs are filed with the Division. A section of the neutron-density porosity log showing the injection interval is attached.
- XI. There is one fresh water well within a mile of the proposed SWD well. This well is located in the SW/4 SW/4 NE/4 SE/4 of Sec 17-23s-33e. A water analysis is attached.
- XII. After examining the available geologic and engineering data, no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Proof of Notice is attached.

III.

WELL DATA

INJECTION WELL DATA SHEET

OPERATOR: Concho Operating, LLC (Operates Concho Production, LLC)

WELL NAME & NUMBER: Bebidas 16 State SWD No. 1 (Formerly Lea RL St. #1)

WELL LOCATION: 1780' FSL 660' FWL L 16 23s 33e
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

See Attached Schematic

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8" @ 748'
Cemented with: 650 sx. or _____ ft³
Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 10 3/4" @ 5100'
Cemented with: 900 sx. or _____ ft³
Top of Cement: 1900' Method Determined: Temp Survey

Production Casing

Hole Size: 9 1/2" Casing Size: 7 5/8" @ 12478'
Cemented with: 2625 sx. or _____ ft³
Top of Cement: 1100' Orig Drilled Method Determined: Temp Survey
Surface Tieback Reentry Circulated
Total Depth: 15950'

Injection Interval

5160' feet to 7350'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 4 1/2" Lining Material: Glassbore / Duoline 20
 Type of Packer: Nickel plated double grip retrievable
 Packer Setting Depth: 5110' ±
 Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

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

If no, for what purpose was the well originally drilled? Oil & Gas

2. Name of the Injection Formation: Delaware Sand

3. Name of Field or Pool (if applicable): Brininstool / Cruz

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.

See wellbore schematic

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

Overlying: Delaware 5090-5158' (Sec 8, 17, 18) Not productive Sec. 16

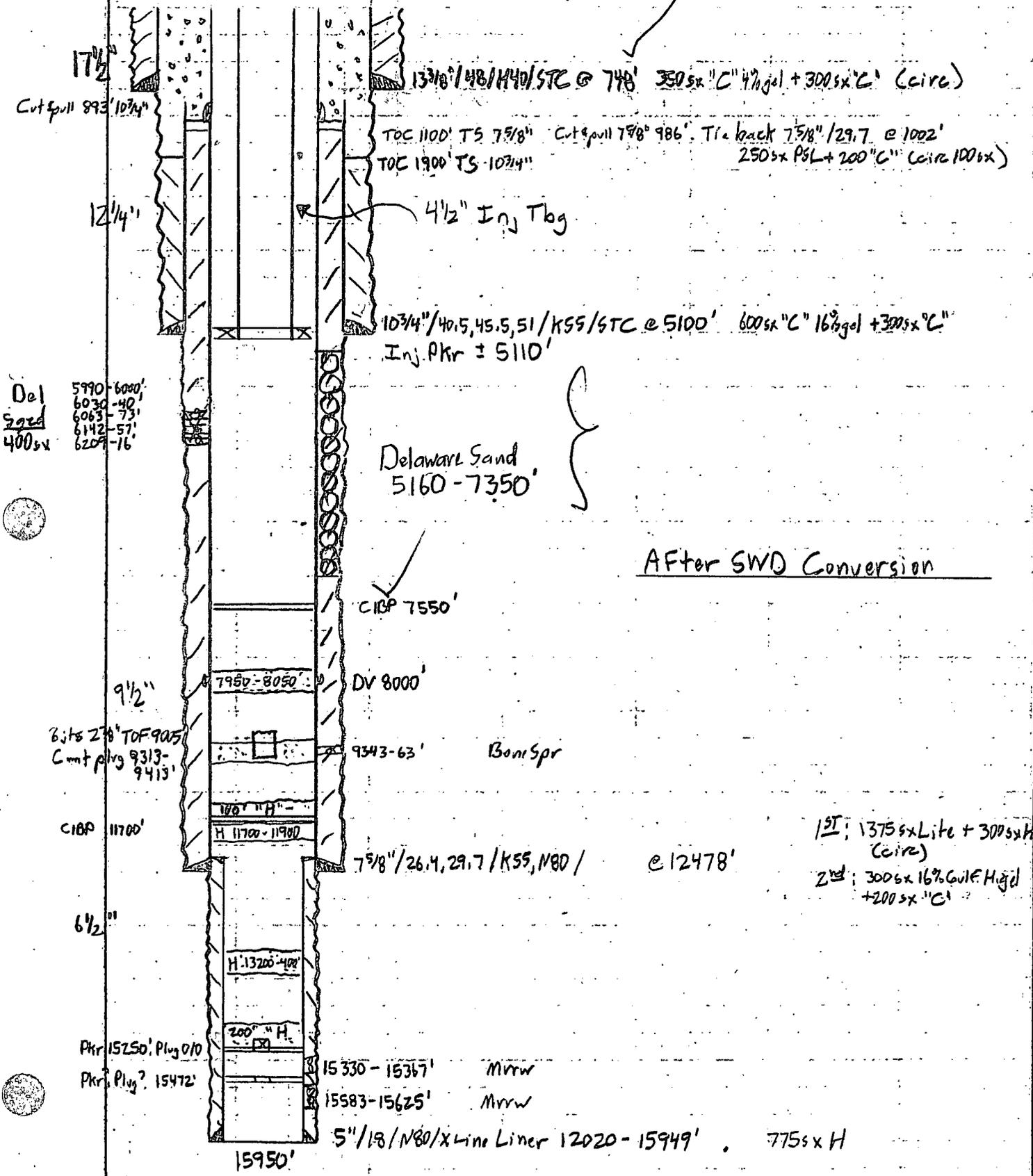
Underlying: Delaware 8865-8882' (Sec 10), Bone Spring 9343-12264'

Wolfcamp 13002-13622', Atoka 14725-14742'

Morrow 15330-15672'

30-025-25518

Bebidas 16 State SWO 1
(Formerly Lea RL St. 1)
1980' FSL, 660' FWL
L-16-23s-33e
Lea, NM



Cut & pull 893' 10 3/4"

13 3/8" / 48 / H40 / STC @ 748' 350sx "C" 4% gel + 300sx "C" (Circ)

TOC 1100' TS 7 5/8" Cut & pull 798' 986' Tie back 7 5/8" / 29.7 @ 1002'
TOC 1900' TS 10 3/4" 250sx PSL + 200 "C" (Circ 100sx)

4 1/2" Inj Tbg

10 3/4" / 40.5, 45.5, 51 / K55 / STC @ 5100' 600sx "C" 16% gel + 300sx "C"
Inj. Pkr ± 5110'

Delaware Sand
5160 - 7350'

After SWD Conversion

CIBP 7550'

DV 8000'

9 1/2"

Bits 2 7/8" TOF 9025'
Cmt plug 8313-9413'

Bone Spr

CIBP 11700'

7 5/8" / 26.4, 29.7 / K55, N80 / @ 12478'

1st: 1375sx Lite + 300sx H (Circ)

2nd: 300sx 16% Gel + 200sx "C"

6 1/2"

H. 13200 - 400'

Pkr 15250' Plg 0/0

Pkr Plg? 15472'

Mrrw

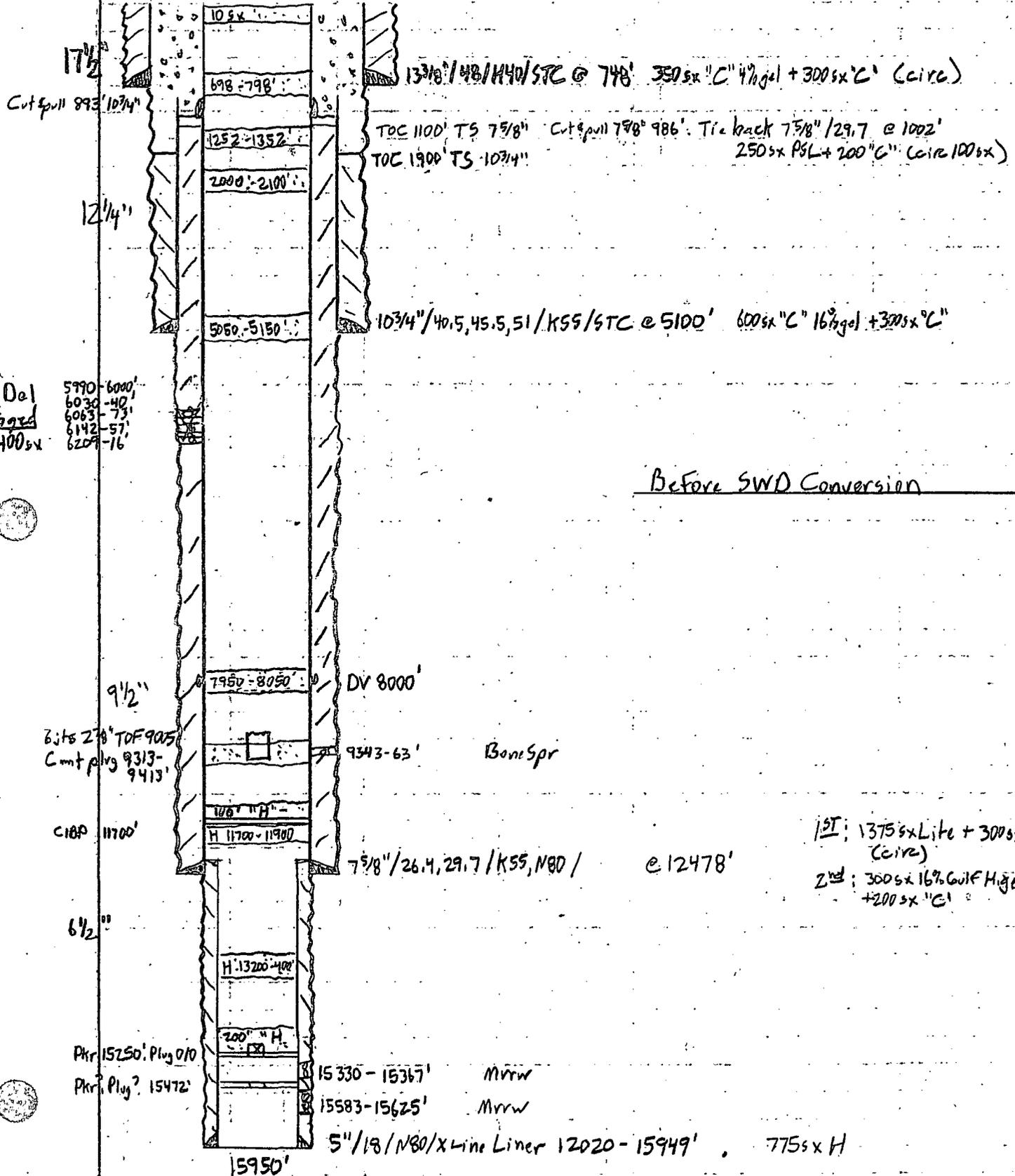
Mrrw

15950'

5" / 18 / N80 / X Line Liner 12020 - 15949' 775sx H

30-025-25518

(Formerly Lea RL St. 1)
1980' FSL, 660' FWL
L-16-23s-33e
Lea, NM

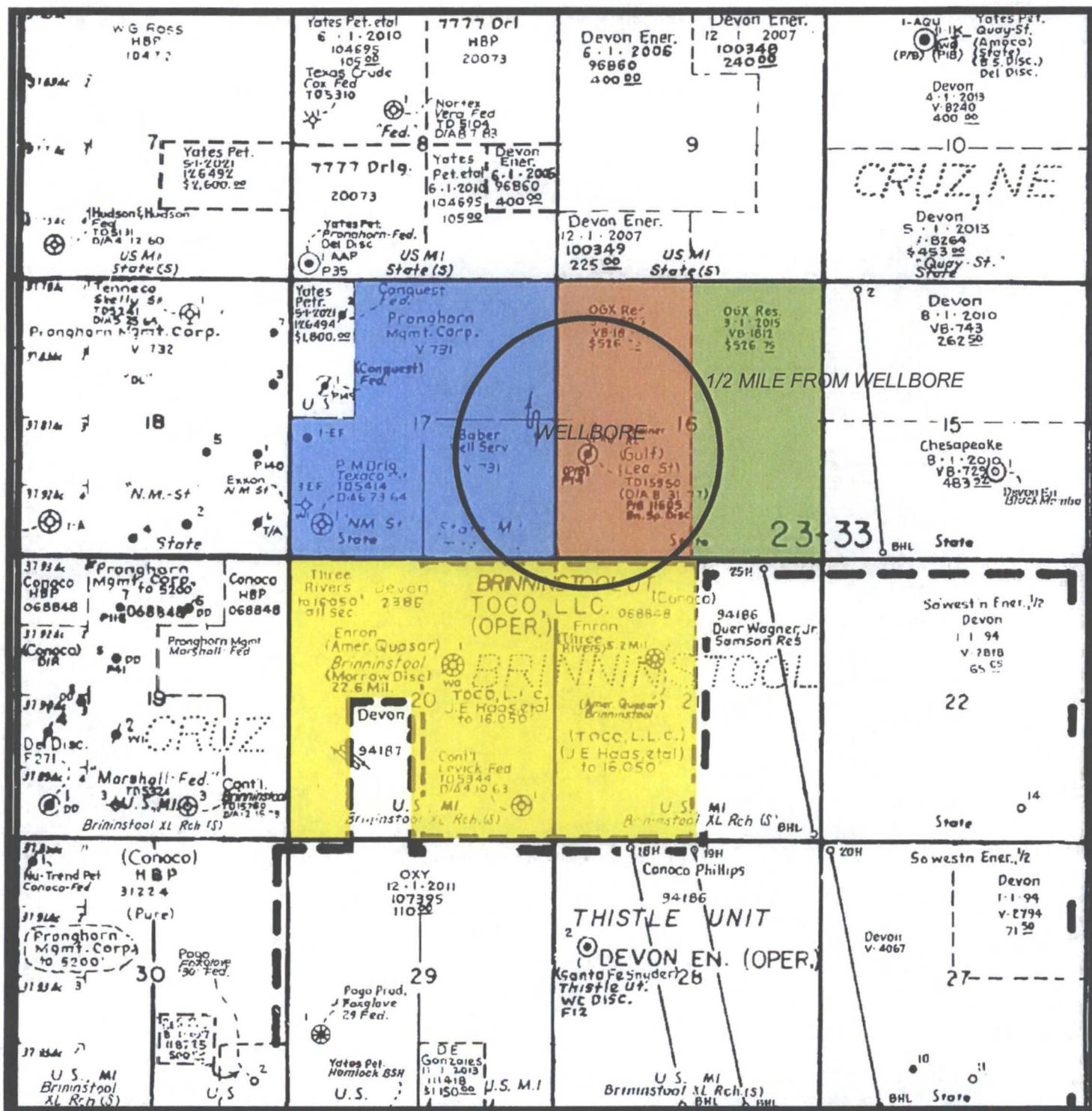


Before SWD Conversion

1st: 1375sx Lite + 300sx H (circ)
2nd: 300sx 16 1/2 Gulf H gel + 200sx 'C'

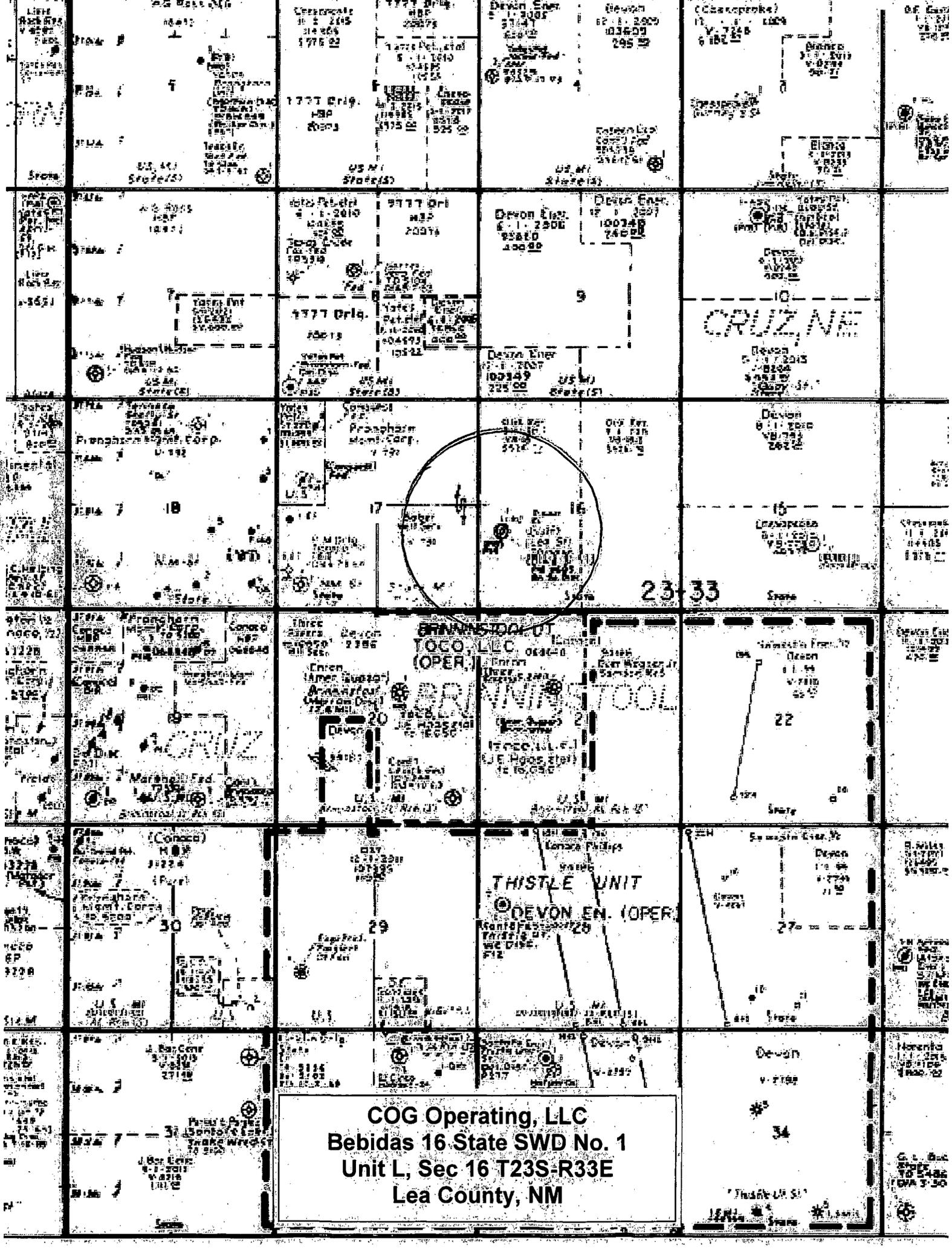
V.

MAP



- COG Acreage, LP
- COG Acreage, LP
- Endurance Resource
- COG Operating LLC

Bebidas 16 State SWD No. 1
Unit L, Sec. 16; T23s - R33e
Lea County, New Mexico



COG Operating, LLC
Bebidas 16 State SWD No. 1
Unit L, Sec 16 T23S-R33E
Lea County, NM

VI.

Wells Penetrating Proposed Disposal Interval Within Half Mile Area of Review

30-025-40854

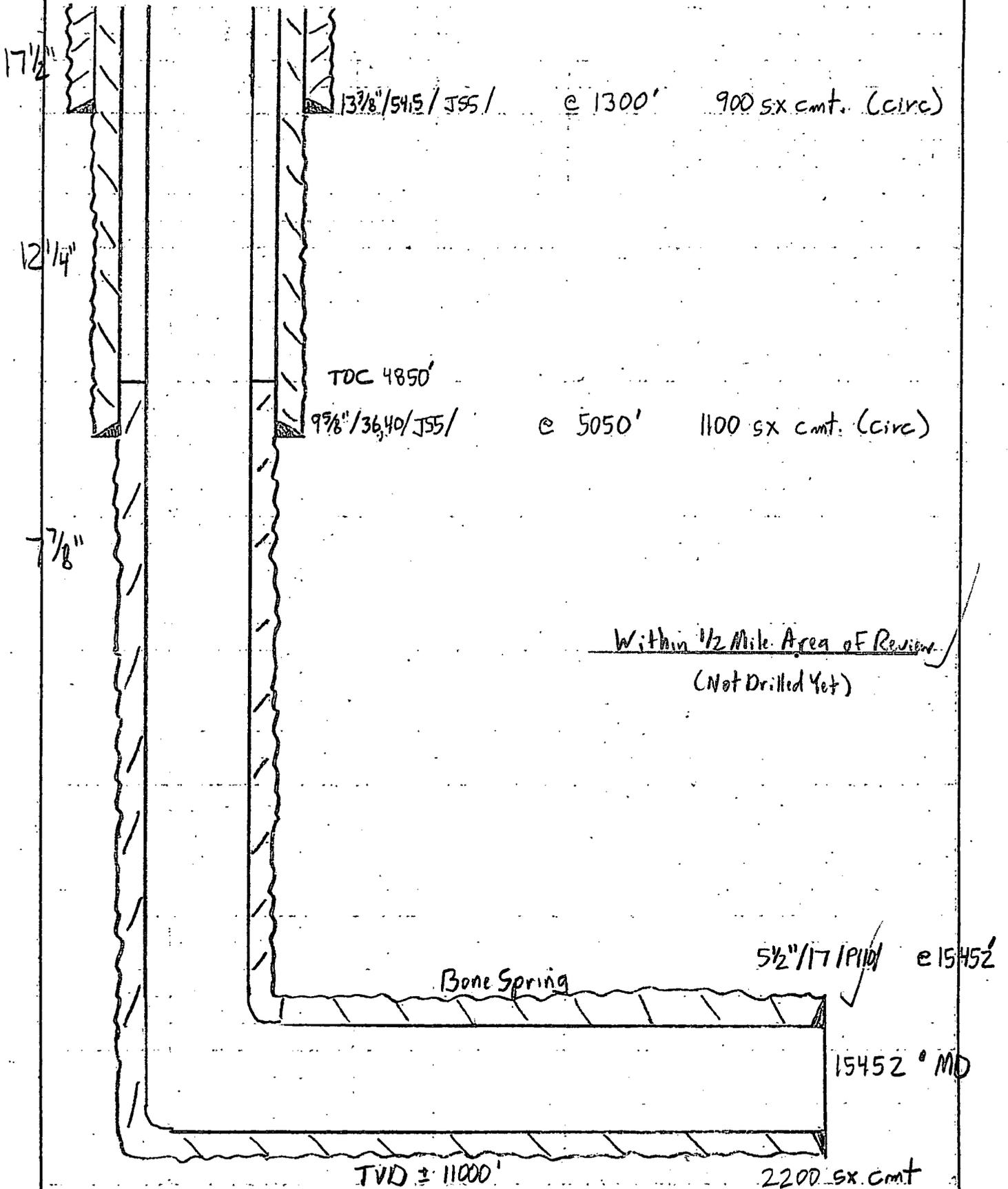
Sebidas State 1 H

394' FSL, 380' FWL (surface)

330' FNL, 380' FWL (EOL)

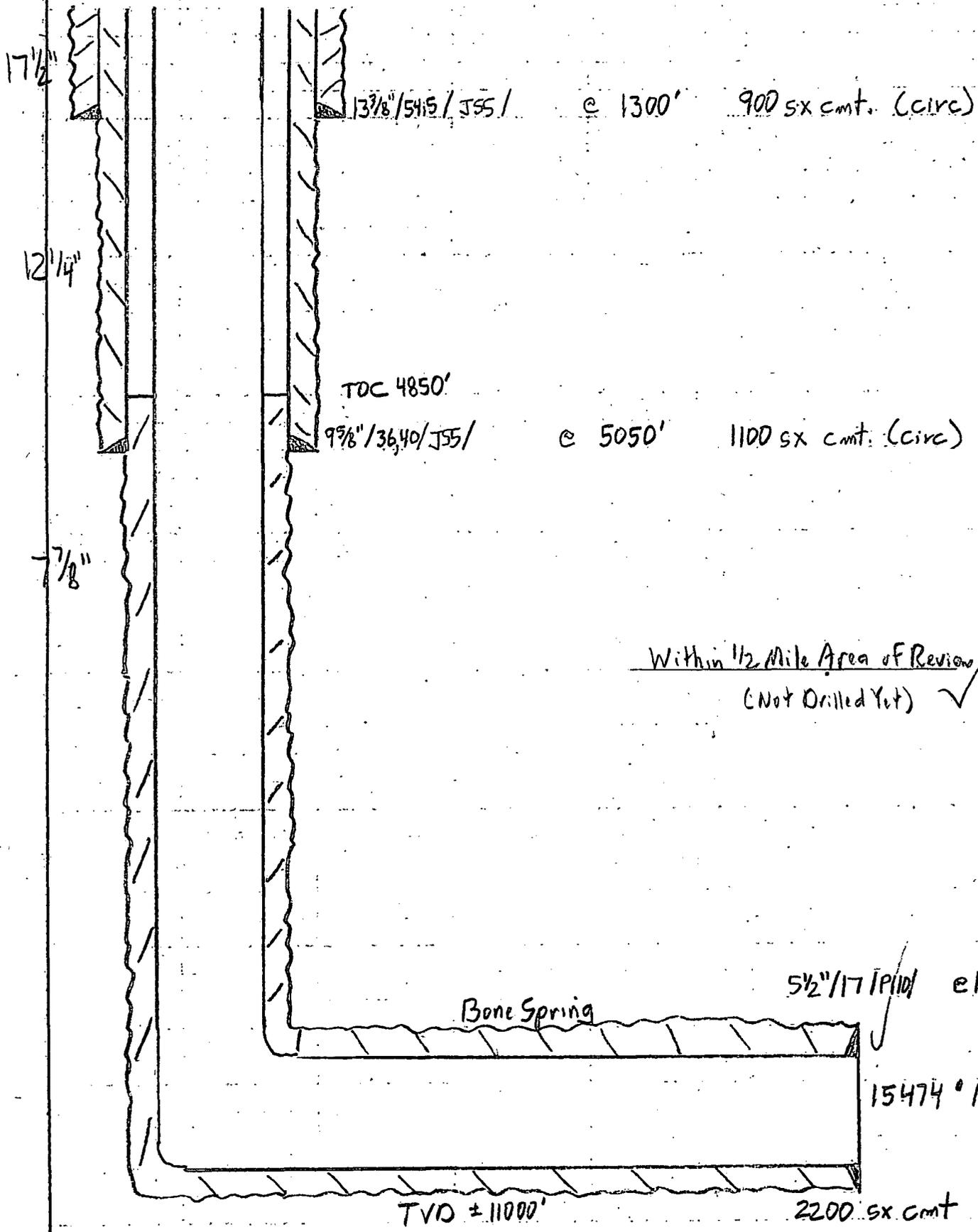
M-16-235-33e

Lea, NM



30-025-40855

Bebidas State 2H
392' FSL, 1887' FWL (surface)
330' FNL, 1887' FWL (EOL)
N-16-23s-33e
Lea, NM

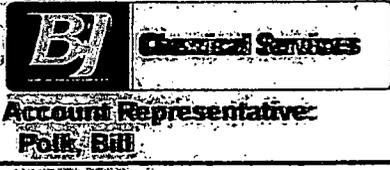


VII.

Water Analysis Produced and Receiving Formation Water

June Spring / Produced water sample

Analytical Laboratory Report for:
MARBOB ENERGY CORPORATION

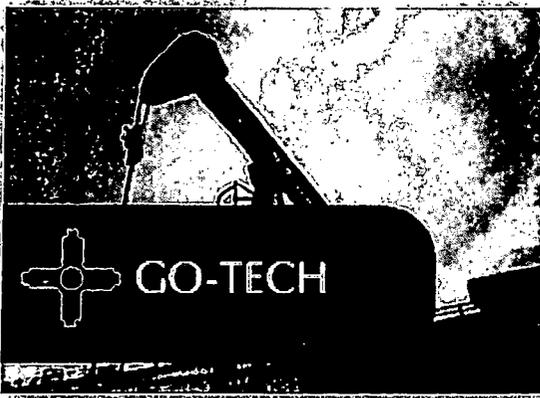


Production Water Analysis

Listed below please find water analysis report from: LPC 31 FED, 1

Lab Test No: 2006151411 Sample Date: 12/13/2006
 Specific Gravity: 1.135
 TDS: 205426
 pH: 6.49

<u>Cations:</u>	<u>mg/L</u>	<u>as:</u>
Calcium	11067	(Ca ⁺⁺)
Magnesium	1751	(Mg ⁺⁺)
Sodium	64721	(Na ⁺)
Iron	58.20	(Fe ⁺⁺)
Potassium	1164.0	(K ⁺)
Barium	0.83	(Ba ⁺⁺)
Strontium	407.00	(Sr ⁺⁺)
Manganese	1.35	(Mn ⁺⁺)
<u>Anions:</u>	<u>mg/L</u>	<u>as:</u>
Bicarbonate	220	(HCO ₃ ⁻)
Sulfate	1400	(SO ₄ ⁻²)
Chloride	126800	(Cl ⁻)
<u>Gases:</u>		
Carbon Dioxide	179	(CO ₂)
Hydrogen Sulfide	17	(H ₂ S)



- ~ Home
- ~ Production Data ▶
- ~ Well Data ▶
- ~ NM Pricesheet
- ~ Water Data ▶
- ~ Projects ▶
- ~ Software ▶
- ~ Archive ▶
- ~ Other Links ▶
- ~ Help ▶

North American Oil and Gas News
 IEA claims global warming may lead to 'Miami Beach In Boston' situation unless urgent action is taken

Enbridge reports second quarter adjusted earnings of \$277 million

Imperial Resources; SWDF full disposal test to commence

Drako Capital announces update on Stolberg well

Source: Oil Voice

NYMEX LS Crude 88.73

Navajo WTXI 0

Henry Hub 3.01

Updated: 8/1/2012

State Land Office Data Access

OCD well/log image files

PRRC NM-TECH NM-BGMR

*Delaware Sample
 Representative of
 Produced and Receiving
 Formations*

NM WAIDS

- Data
 - Produced Water
 - Ground Water
 - Conversion Tools
- Scale
 - Scale details
 - Stiff
 - Oddo
 - Probable Mineral Composition mix
- Corrosion
- Theory
 - Uniform
 - Galvanic
 - Crevice
 - Hydrogen Damage
 - EIC
 - Erosion
- Equipment

General Information About: Sample 4412			
HANAGAN B FEDERAL			
API	3002508151	Sample Number	
Unit/Section/Township/Range	O / 15 / 24S / 32E	Field	DOUBLE X
County	Lea	Formation	DEL
State	NM	Depth	
Lat/Long	32.21178, 103.66422	Sample Source	UNKNOWN
TDS (mg/L)	229709	Water Type	
Sample Date (MM/DD/YYYY)		Analysis Date (MM/DD/YYYY)	
Remarks/Description			
Cation Information (mg/L)		Anion Information (mg/L)	
Potassium (K)		Sulfate (SO)	491
Sodium (Na)		Chloride (Cl)	142100

- Artificial
- Casing and Tubing
- Surface
- Enhanced
- Gases
 - O2
 - CO2
 - H2S
 - Microbes
- Prevention
- References
- Maps
 - Trend Maps
 - GW
 - PW
 - Geology
 - PLSS
 - Help
 - Online Map

Calcium (Ca)		Carbonate (CO ₃)	
Magnesium (Mg)		Bicarbonate (HCO ₃)	168
Barium (Ba)		Hydroxide (OH)	
Manganese (Mn)		Hydrogen Sulfide (H ₂ S)	
Strontium (Sr)		Carbon Dioxide (CO ₂)	
Iron (Fe)		Oxygen (O)	

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801

X.

**Log Across Proposed
Delaware Sand
Injection Interval**

L-16-T23S-R33E

1980FS 660FW

C W TRAINER

RL # 1



30-025-25518

Combination Logging Systems

Compensated **Densilog**
Compensated **Neutron**



COMPANY GULF ENERGY & MINERALS CO-U.S.

WELL LEA RL STATE NO. 1

FIELD MORROW (UNDFSIGNATED)

COUNTRY LEA STATE NEW MEXICO

LOCATION:

1980 FSL & 660 FWL

SEC 16 TWP 23-S RGE 33-E

Other Services
P-L/GR

GROUND LEVEL

Elev 3695

KB 3715

K B 20 Ft. Above Permanent Datum

GL 3695

Date 8-22-77

Run No. ONE

Service Order 808414

IDepth - Driller 15950

IDepth - Logger 15938

IBottom Logged Interval 15936

Top Logged Interval SURFACE

Casing - Driller 7 5/8 124.78

Casing - Logger 124.58

Bit Size 6 1/2"

Type Fluid in Hole S.A.T. MUD

Density and Viscosity 14.8 57

Drill and Fluid Loss 10 4

Source of Sample P.I.T.

Rmt @ Meas. Temp 053 78 F

Rmt @ Meas. Temp 053 78 F

Rmt @ Meas. Temp MEAS

Rmt @ BHT 021 195 F

Time Since Circ 14 HOURS

Max Rec. Temp. Deg. F 195 F

Equip. No. and Location 6118 HOPERS

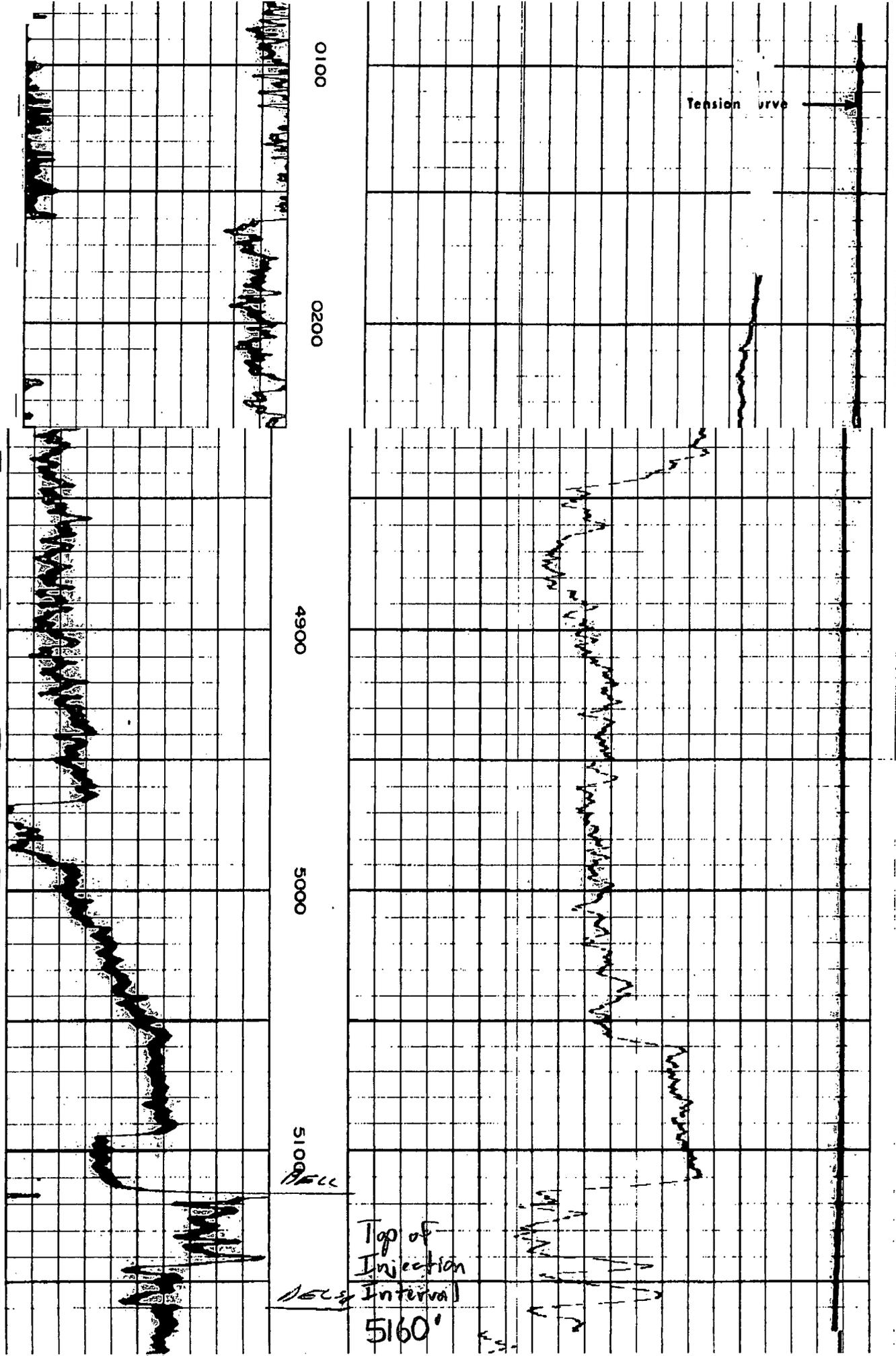
Recorded By JUFWEKE

Witnessed By P.M. KARSKI

TOLOG HERE
NEUTRON RECORDED WITH BOWSPRING DECENTRA 171R.
REPEAT SECTION & BOTTOM OF HOLE SEVERLY AFFECTED BY HOLE RUGOSITY.

EQUIPMENT DATA

	RUN NO 2			RUN NO 3		
	CDL	CNL	GR	CDL	CNL	GR
2207M	2413	1306				
24715	29895	34112				
5.5"	3.62"	3.5"				
IGLOX	D6N3	D6G4				
GEIGER	SCINT.	SCINT.				
		6'				
S3T20	S17S20SK					
423	34354					
2254	2254	3606				
29318	29473	31917				



Tension curve

0100

0200

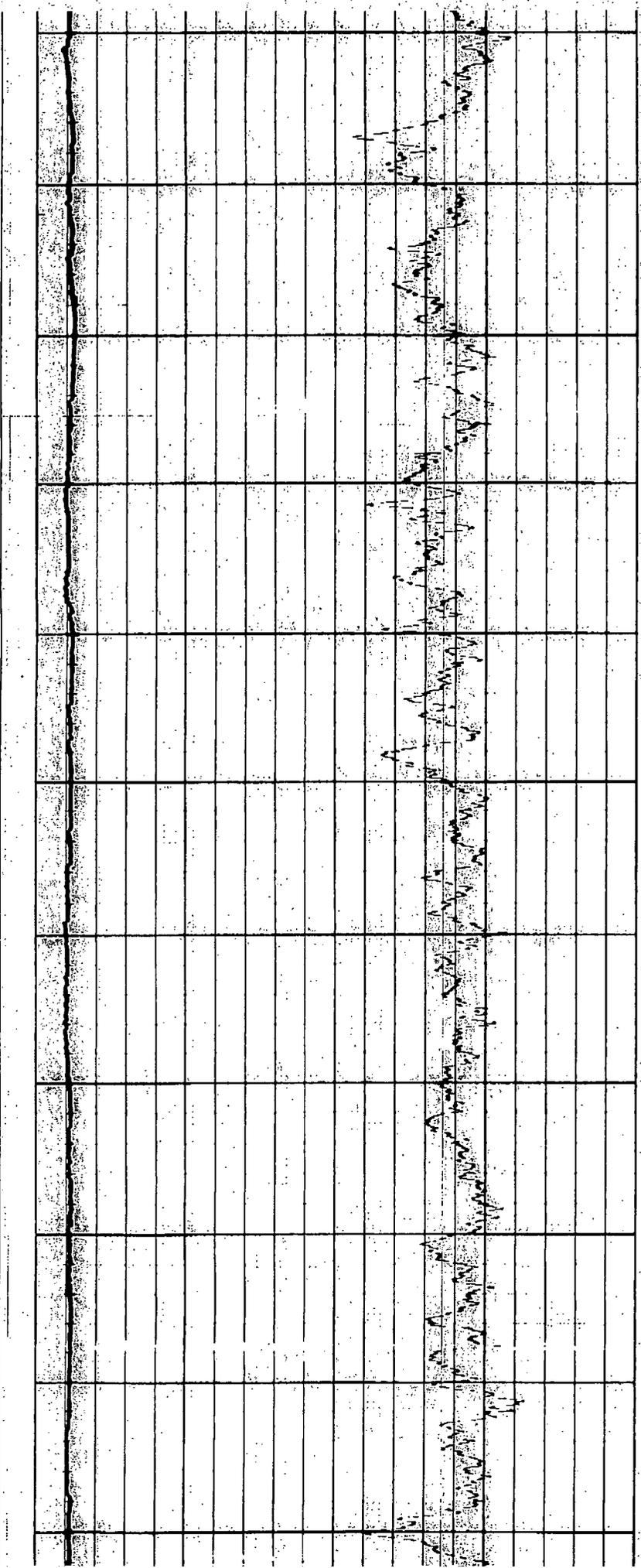
4900

5000

5100

Well

Top of
Injection
Interval
5160'



5700

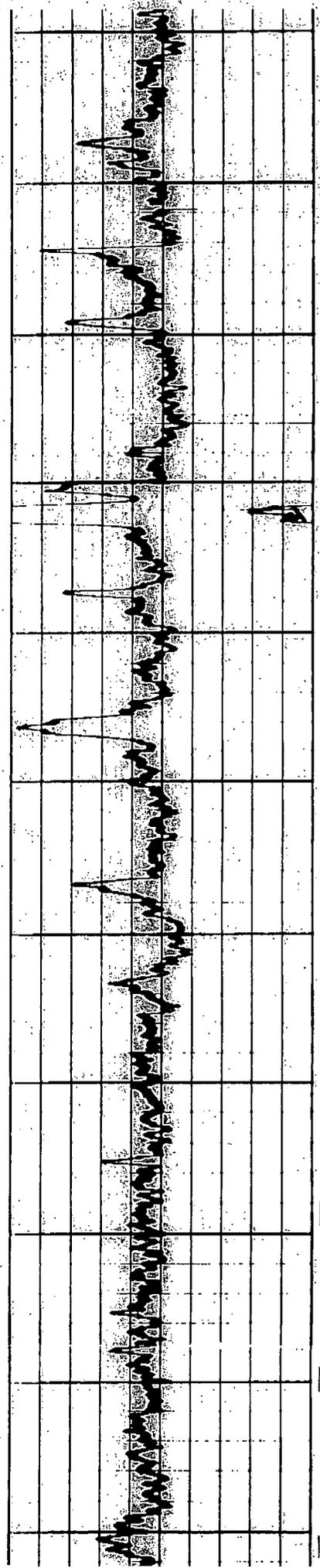
5600

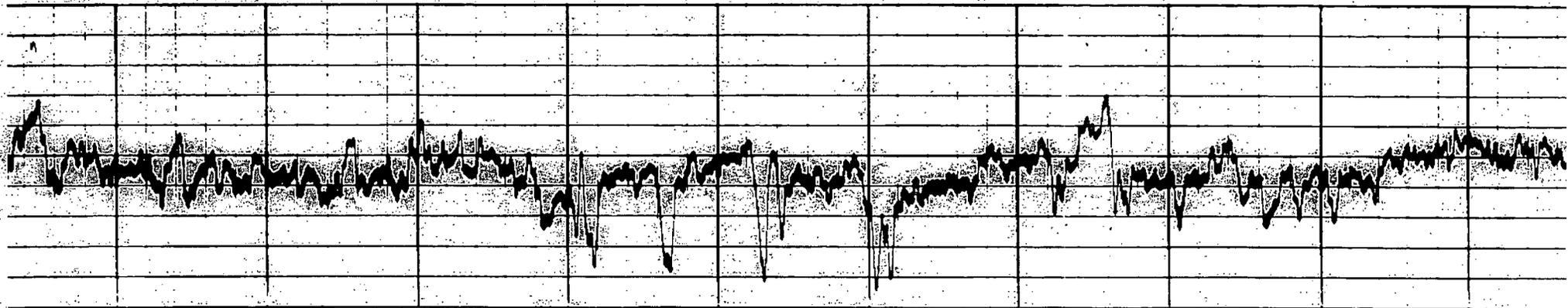
5500

5400

5300

5200





6200

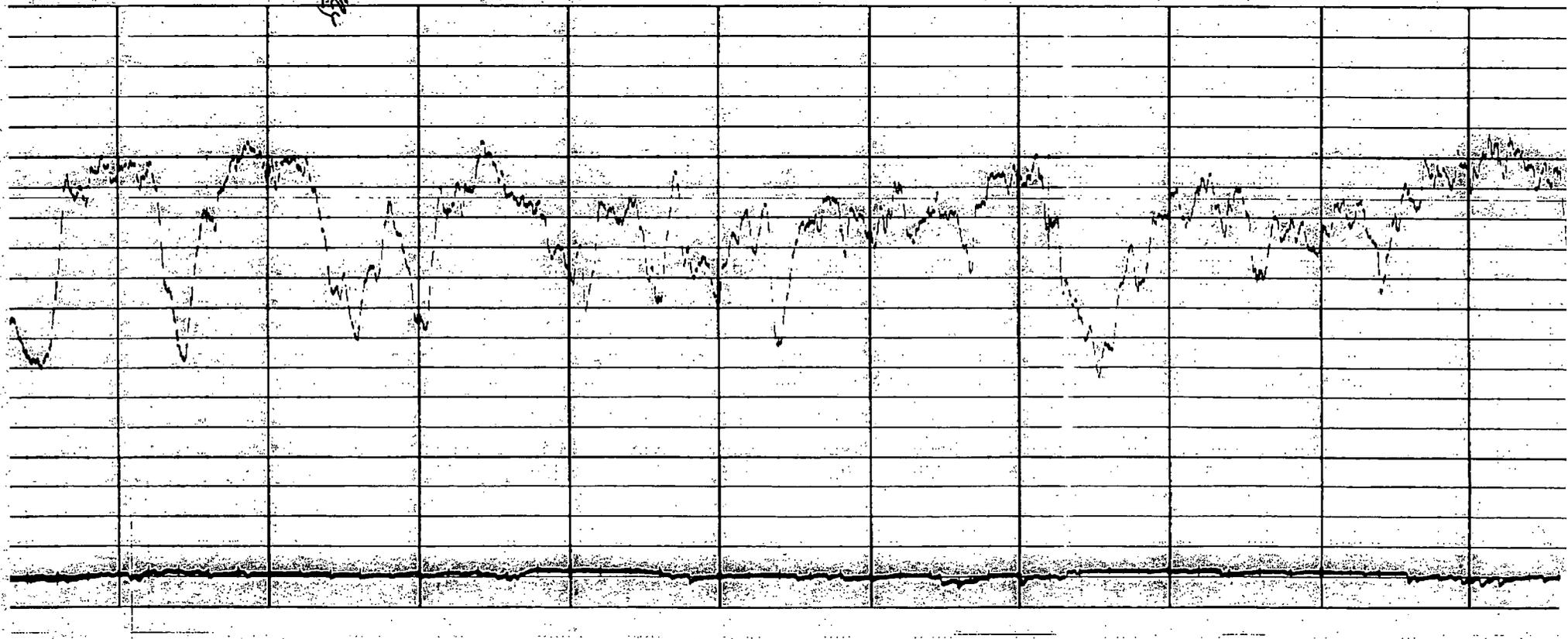
CHERRY

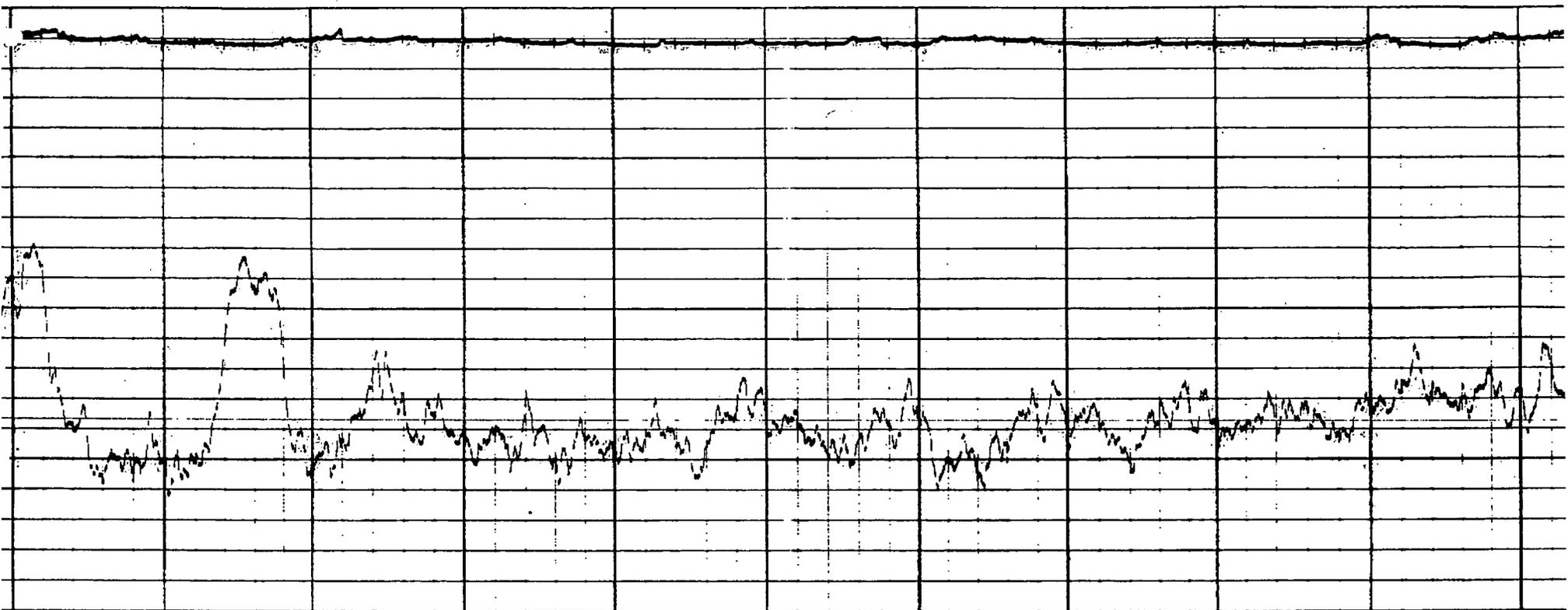
6100

6000

6065

5800





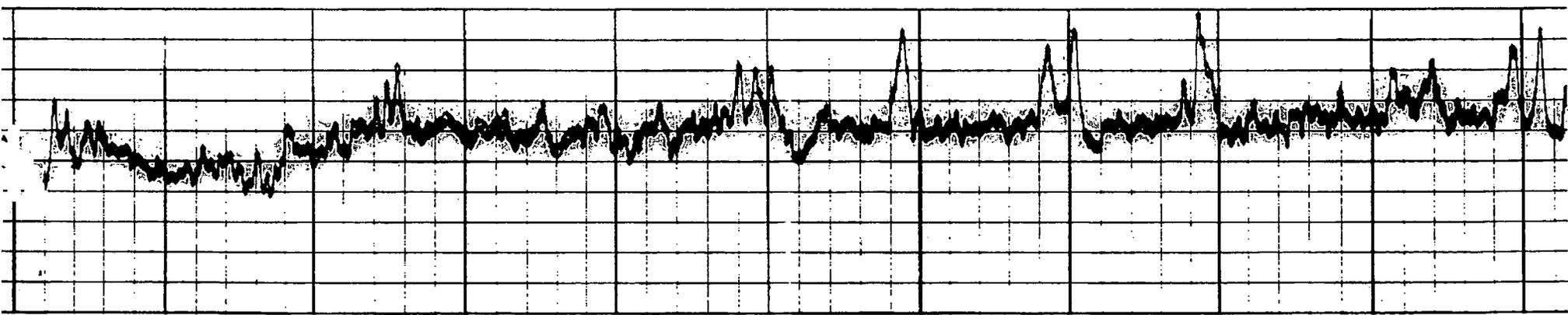
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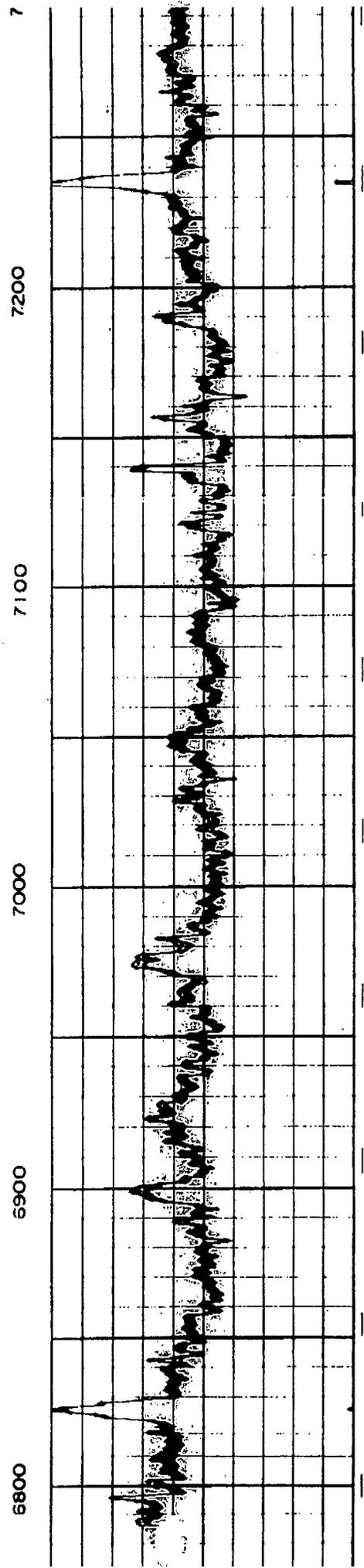
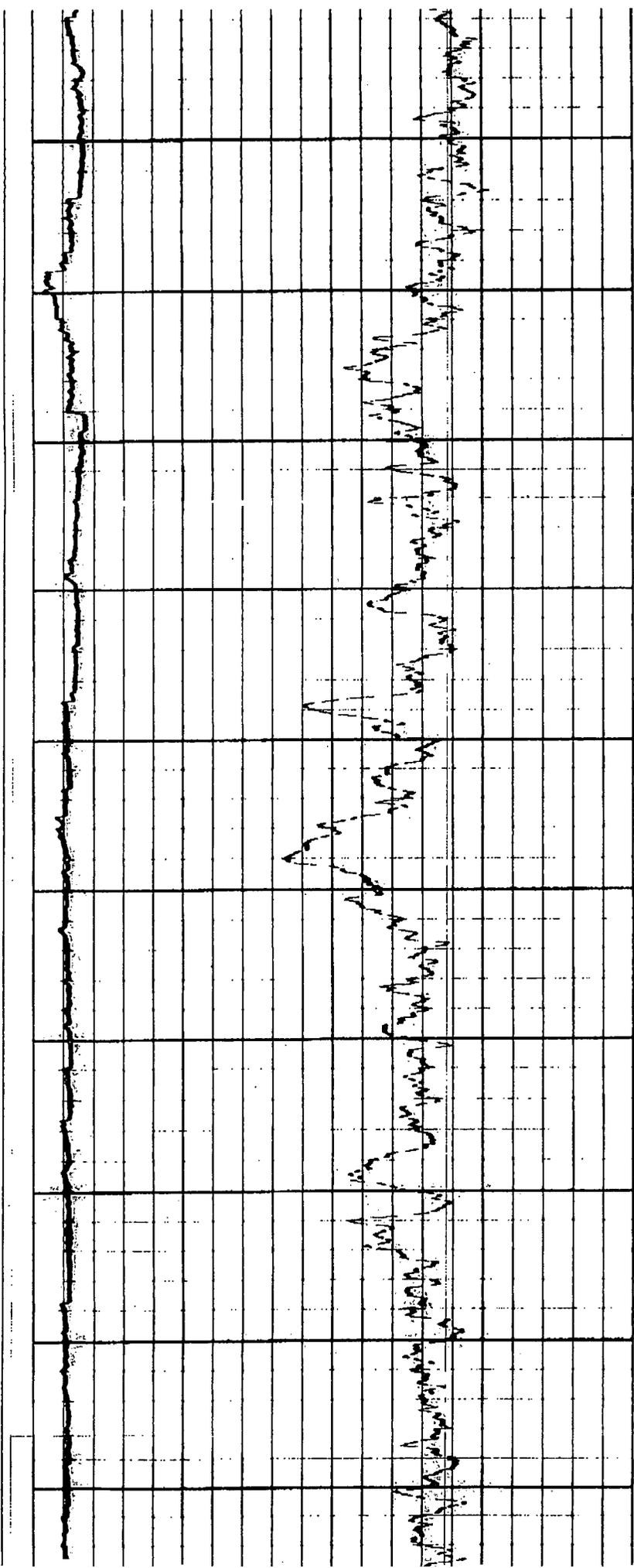
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6500

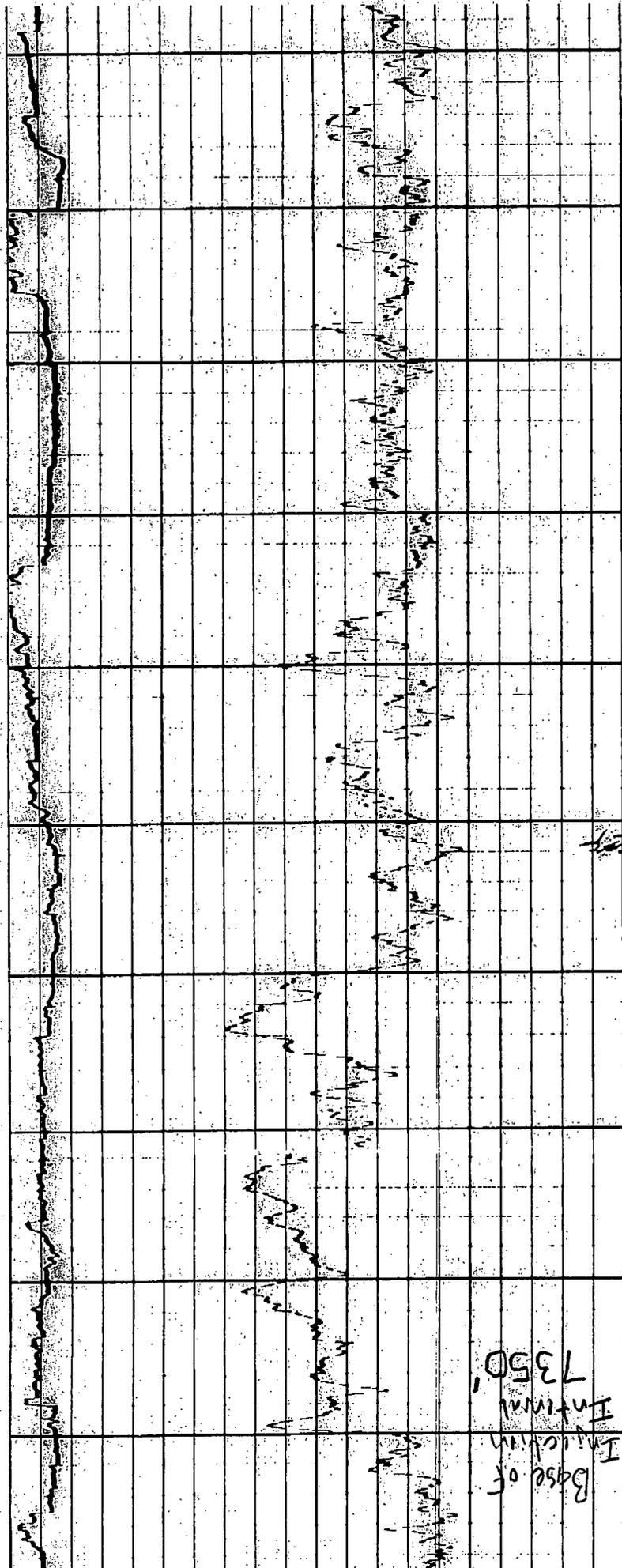
6600

6700





5800 6900 7000 7100 7200 7



7800

7700

7600

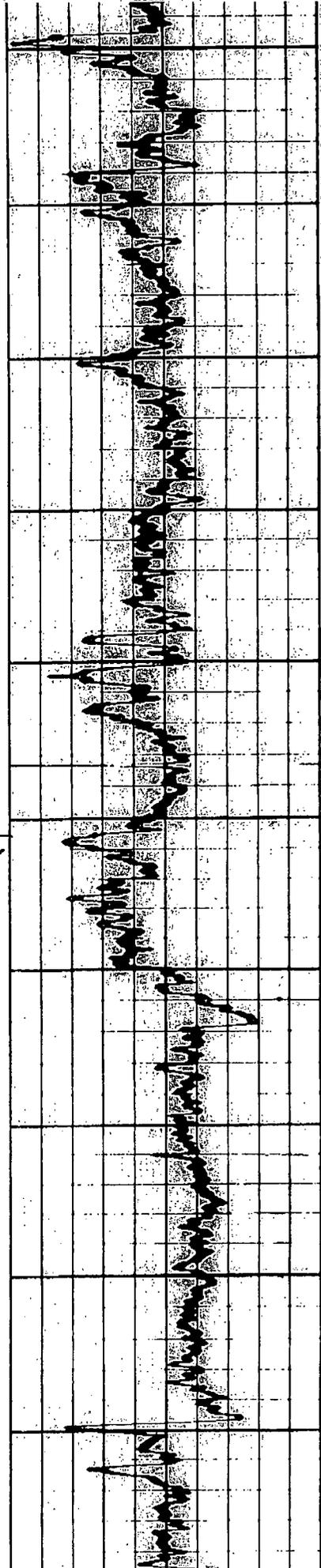
7500

7400

Base of
Inclined
Inclined
7350'



0



7800

7700

7600

7500

7400

0

XI.

**Fresh Water Sample
Analyses**



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)
 C=the file is closed) (quarters are smallest to largest). (NAD83 UTM in meters)

WR/File Nbr	Sub	basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	q	q	q	q	Sec	Tws	Rng	X	Y
<u>C 02277</u>			COM	64.5	BRININSTOOL XL RANCH LLC	LE	<u>C 02277</u>		Greater than 1 mile away	Shallow	2	3	4	20	23S	33E	632663	3572970*	
<u>C 03562</u>	C	STK		3	ATKINS ENGINEERING ASSOC, INC.	LE	<u>C 03562</u> POD1				3	2	4	17	23S	33E	632747	3574765	

Record Count: 2

PLSS Search:

Section(s): 8-10, 15-17, 20-22 **Township:** 23S **Range:** 33E

Sorted by: File Number

*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.



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y
C 03562 POD1	3 2 4 17 23S 33E	632747	3574765

Driller License:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

Well application approved July 20, 2012
 appears to be a taking over of an existing
 well called the "Graham Well" in
 SW1/4 SW1/4 NE1/4 SE1/4 Sec. 17-23s-23e.
 Well was drilled in 1972 TD 550', 8 5/8" casing,
 water level 504.9'.

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.



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 507817

Transaction Desc: C 03562

File Date: 06/22/2012

Primary Status: PMT Permit

Secondary Status: APR Approved

Person Assigned: *****

Agent: ATKINS ENGINEERING ASSOC, INC.

Contact: JESSICA ATKINS

Applicant: LIMESTONE LIVESTOCK, LLC

Contact: BILL ANGELL

Events

Date	Type	Description	Comment	Processed By
 06/22/2012	APP	Application Received	*	*****
07/20/2012	FIN	Final Action on application		*****
07/20/2012	WAP	General Approval Letter		*****
12/07/2012	QAT	Quality Assurance Completed	IMAGES	*****
12/18/2012	ARV	Rec & Arch - file location	C 03562 Box: 1317	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 03562		3		STK 72-12-1 LIVESTOCK WATERING
**Point of Diversion				
C 03562 POD1		632747	3574765	

Remarks

EXISTING WELL

Conditions

- 10 Total diversion from all wells under this permit number shall not exceed 3 acre-feet per annum.
- 14 This permit authorizes the diversion of water for watering livestock. The total diversion of water under this permit shall not exceed 3 acre-feet per year.
- 18 Any diversion of water made in excess of the authorized maximum diversion amount shall be repaid with twice the amount of the over-diversion during the following calendar year. Repayment shall be made by either: (a) reducing the diversion from the well that is the source of the over-diversion; or (b) acquiring or leasing a valid, existing consumptive use water right in an amount equal to the repayment amount and submitting to the State Engineer for his approval a plan for the proposed repayment.

Action of the State Engineer

Action of the State Engineer

Approval Code: A - Approved

Action Date: 07/20/2012

State Engineer: Scott A. Verhines, P.

[Faint, illegible handwritten text]

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.

Locator Tool Report

General Information:

Application ID: 29 Date: 07-16-2012 Time: 15:29:39

WR File Number: C
Purpose: POINT OF DIVERSION

Applicant First Name: LIMESTONE
Applicant Last Name: LIVESTOCK

GW Basin: CARLSBAD
County: LEA

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

SW 1/4 of SW 1/4 of NE 1/4 of SE 1/4 of Section 17, Township 23S, Range 33E.

Coordinate System Details:

Geographic Coordinates:

Latitude: 32 Degrees 18 Minutes 6.6 Seconds N
Longitude: 103 Degrees 35 Minutes 24.1 Seconds W

Universal Transverse Mercator Zone: 13N

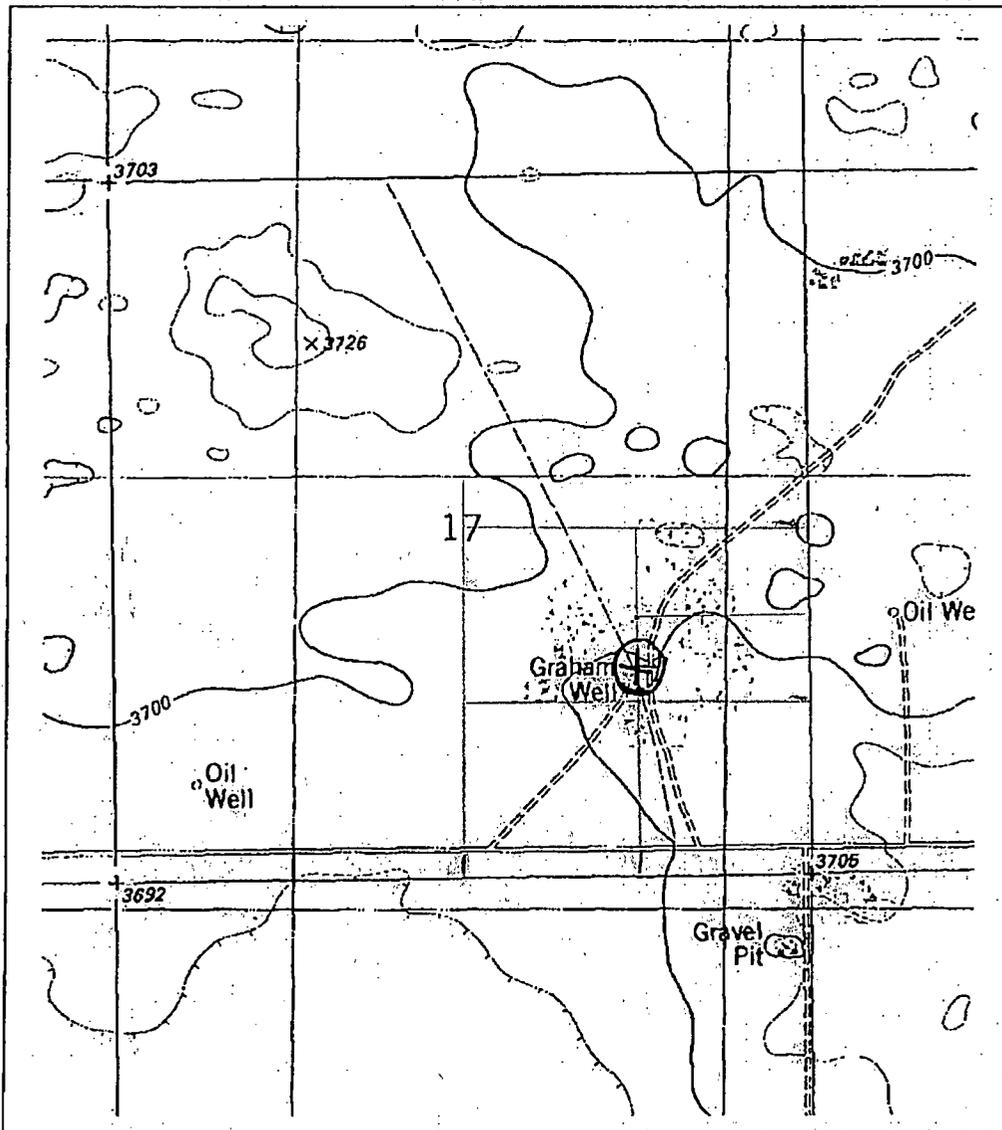
NAD 1983(92) (Meters)	N: 3,574,765	E: 632,747
NAD 1983(92) (Survey Feet)	N: 11,728,209	E: 2,075,938
NAD 1927 (Meters)	N: 3,574,564	E: 632,795
NAD 1927 (Survey Feet)	N: 11,727,547	E: 2,076,097

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 144,578	E: 235,001
NAD 1983(92) (Survey Feet)	N: 474,336	E: 770,998
NAD 1927 (Meters)	N: 144,560	E: 222,448
NAD 1927 (Survey Feet)	N: 474,276	E: 729,815

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: C

Scale: 1:16,510

Northing/Easting: UTM83(92) (Meter): N: 3,574,765

E: 632,747

Northing/Easting: SPCS83(92) (Feet): N: 474,336

E: 770,998

GW Basin: Carlsbad

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser Owner Other USGS

Date 9/21 19 72 Record by Ljford

LOCATION: County Lea Map 119.2.0

OWNER _____

DRILLER _____ Completed _____ 19 _____

TOPO SITUATION _____ USGST Elev 3701

DEPTH 550 ft Rept Meas Use Stock

CASING 8 5/8 in to _____ ft Log _____

PUMP: Type submersible Make _____

Ser.no./model _____ Size of dischg: 2 in.

PRIME MOVER: Make _____ HP _____

Ser.no. _____ Power/Fuel electric

PUMP DRIVE: Gear Head Belt Head Pump Jack

Make _____ Ser.no. _____ VHS

WATER LEVEL: 504.9 ft meas 9/21 19 72 above lower
below

outside edge of 3/4" elbow for electric line

_____ which is 0.50 ft above LS
below

PERMANENT RP is Top of hanger plate (Steel plate welded to a thread protector)

which is _____ ft above described MP and _____ ft above LS
below below

REMARKS Well discharges into a steel tank located 50' (E

AQUIFER(S): TRS

Well No. _____ on Photo _____ DPN 25-12813

File No. _____ Loc. No. 23.33.17.42331

Remarks cont. of well. Well is shown on topo map as
'Graham Well'. Water sample collected from storage tank.

SKETCH:



INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date <u>Sept. 21</u> , 19 <u>72</u>				504.9
Hour _____ AM Obs <u>FPL</u>				0.5
Not POA () POA ()	504.9			504.4

W L meas after pump shut off _____ min. Pumping W L ()
 Remarks _____



February 12, 2013

Hobbs News-Sun
P.O. Box 850
Hobbs, NM 88240

Re: Legal Notice
Salt Water Disposal Well
Bebidas 16 State SWD #1

To Whom It May Concern:

Enclosed is a legal notice regarding New Mexico Oil Conservation Division C-108 Application for Authorization to Inject for a salt water disposal well.

Please run this notice and return the proof of notice to the undersigned at:

COG Operating LLC, 2208 W. Main St., Artesia, NM 88210

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins
Senior Operations Engineer

BC/bg
Enclosures

HOBBS NEWS SUN
LEGAL NOTICE

COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210 has filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Bebidas 16 State SWD No. 1 is located 1980' FSL & 660' FWL, Section 16, Township 23 South, Range 33 East, Lea County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware and Bone Spring formations. The disposal water will be injected into the Delaware formation at a depth of 5160' to 7350' at a maximum surface pressure of 1032 psi and a maximum rate of 10,000 BWPD. The proposed SWD well is located approximately 26 miles west of Jal. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210, or call 575-748-6940.

Published in the Hobbs News Sun, Hobbs, New Mexico
_____, 2013.



March 15, 2013

New Mexico Oil Conservation Division
Attn: William V. Jones
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Application For Authorization To Inject
Bebidas 16 State SWD #1
Township 23 South, Range 33 East, N.M.P.M.
Section 16: 1980' FSL & 660' FWL
Lea County, New Mexico

Dear Mr. Jones:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the referenced well. Attached, for your review, is a copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins
Senior Operations Engineer

BC/bg
Enclosures



March 15, 2013

New Mexico State Land Office
310 Old Santa Fe Trail,
Santa Fe, NM 87501

Re: Application to Inject
Bebidas 16 State SWD #1
Township 23 South, Range 33 East, N.M.P.M.
Section 16: 1980' FSL & 660' FWL
Lea County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to drill this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins
Senior Operations Engineer

BC/bg
Enclosures



March 15, 2013

Oil Conservation Division
Attn: Paul Kautz
1625 North French Dr.
Hobbs, NM 88240

RE: Application For Authorization To Inject
Bebidas 16 State SWD #1
Township 23 South, Range 33 East, N.M.P.M.
Section 16: 1980' FSL & 660' FWL
Lea County, New Mexico

Dear Mr. Kautz:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the referenced well. Attached, for your review, is a copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

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Brian Collins
Senior Operations Engineer

BC/bg
Enclosures



March 15, 2013

Endurance Resource
15455 Dallas Parkway
Suite 600
Addison, TX 75001

RE: Application For Authorization To Inject
Bebidas 16 State SWD #1
Township 23 South, Range 33 East, N.M.P.M.
Section 16: 1980' FSL & 660' FWL
Lea County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to reenter this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as the surface owner, an operator or a lessee within a half mile radius area of review. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

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Brian Collins
Senior Operations Engineer

BC/bg
Enclosures



March 15, 2013

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

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Bebidas 16 State SWD #1
Township 23 South, Range 33 East, N.M.P.M.
Section 16: 1980' FSL & 660' FWL
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Sincerely,

Brian Collins
Senior Operations Engineer

BC/bg
Enclosures

RECEIVED OGD
2013 MAR 21 P 2:10