DATE IN 5/21/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 5/22/08	TYPE SWDT	APP NO. PKVR0814331165

ABOVE THIS LINE FOR DIVISION USE ONLY

1138

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

[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 _____

RECEIVED
2008 MAY 21 PM 12 42

[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.

CAROLYN HAYNIE	Carolyn Haynie	PETROLEUM ENGINEER TA	5-19-08
Print or Type Name	Signature	Title	Date

chay@chevron.com
e-mail Address

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistance

Permian Business Unit
Chevron MidContinent, L.P.
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7558
chay@chevron.com

May 19, 2008

New Mexico Oil Conservations Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87504

RE: **APPLICATION FOR AUTHORIZATION**
TO INJECT AS SWD - OCD FORM C-108
C.H. LOCKHART FEDERAL (NCT-1) WELL #8
LEA COUNTY, NEW MEXICO

Chevron U.S.A., Inc. respectfully requests administrative approval to convert the C.H. Lockhart (NCT-1) #8, (API # 30-025-12131), to a Salt Water Disposal well. The Lockhart # 8 is located: 660' FSL & 660' FEL, Unit Letter P, Section 18, T22S, R38E, Lea County, New Mexico, and was previously an Injector in the Drinkard formation.

The injection interval will be in the San Andres and there is no production from this interval in the immediate area. The C.H. Lockhart Federal (NCT-1) #8 has been temporarily abandoned (TA'd), since in April 2004. The San Andres disposal injection interval will be perforated from 4925' – 4935', 4865' – 4875', 4780'- 4790', 4660'- 4670', 4480'- 4490', and 4340'- 4350', with 4 JSPF, 120 deg phasing, total of 240 holes.

Chevron is the operator, with 100% working interest. Attached is the OCD Form C-108 with information relative to the SWD injection of the referenced well. A notification letter was sent to applicable surface land owners and offset operators within the ½ mile radius, and is included in the attachments. Approval of this request will allow for further lease development and reduce the cost of hauling water.

For your convenience, I have enclosed an envelope with my return address, so that the decision for this application can be sent directly to me. If you require additional information or have any questions, please contact me by telephone at 452-687-7261, or by email at chay@chevron.com.

Sincerely,

Carolyn Haynie
Chevron U.S.A. Inc.
Petroleum Engineering TA
New Mexico Area

Enclosure

cc: NMOCD – Hobbs District 2
Mike Howell
Danny Lovell

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

RECEIVED
2008 JUL 21 PM 2 15

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

II. OPERATOR: **CHEVRON U.S.A. INC.**

ADDRESS: **15 SMITH ROAD; MIDLAND, TX 79705**

CONTACT PARTY: **CAROLYN HAYNIE** PHONE: **432-687-7261**

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; **AVG= 1000 BWPD, Max = 5,000 BWPD**
2. Whether the system is open or closed; **CLOSED**
3. Proposed average and maximum injection pressure; **Avg = 500 psi; Max = 868 psi**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **PADDOCK, BLINEBRY, TUBB, DRINKARD, & ABO**
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. **4,800 gals 15% NEFE HCL acid**

*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: **Carolyn Haynie** TITLE: **Petroleum Engineering TA**

SIGNATURE: Carolyn Haynie DATE: 7-15-08

E-MAIL ADDRESS: **chay@chevron.com**

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

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

III. WELL DATA

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

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

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

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

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

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

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

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

(2) The injection interval and whether it is perforated or open-hole.

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

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

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

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

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

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

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

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

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

Side 1

INJECTION WELL DATA SHEET

OPERATOR: CHEVRON U.S.A. INC

WELL NAME & NUMBER: C.H. LOCKHART FEDERAL (NCT-1) # 8

WELL LOCATION:	660' FSL & 660' FEL	P	18	22S	38E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 550 sx. ***or*** _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 8-5/8"

Cemented with: 1200 sx. ***or*** _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"

Cemented with: 650 sx. ***or*** _____ ft^3

Top of Cement: 3130' Method Determined: by TS

Total Depth: 7200'

Injection Interval

4340' feet to 4935'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: IPC Tbg.

Type of Packer: Nickel Plated LOC-SET Injection Packer

Packer Setting Depth: 4250'

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

Additional Data

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

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

2. Name of the Injection Formation: San Andres; perforations 4340' – 4935'

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

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.

   DRK Perfs at 6846' – 7158'; plugged w/CIBP @ 6751' and topped with 35' of Cmt

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

   Higher: Grayburg 3779' - Base = 4060' (TVD) – San Andres

   Lower: Paddock 5202' – Base = 5600' T - Blinebry

WELL DATA SHEET

Location: 660' FSL & 660' FEL **Well Name:** C. H. Lockhart Federal (NCT-1) #8 **Lease Type:** Federal
County: Lea **State:** New Mexico **Sec:** 18-P **Township:** 22S **Range:** 38E
Current Status: TA'd - Injector **Refno:** FB3080 **API:** 30-025-12131 **Cost Center:** UCU41Z046
Current Formation(s): Drinkard/Abo WI well

CURRENT

KB:	3382'
DF:	3381'
GL:	3370'
Spud Date:	5/15/1959
Compl. Date:	6/7/1959

Surface Csg.

Size:	**13 3/8"**
Wt.:	**48#**
Set @:	**398'**
Sxs cmt:	**550**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**17-1/2"**

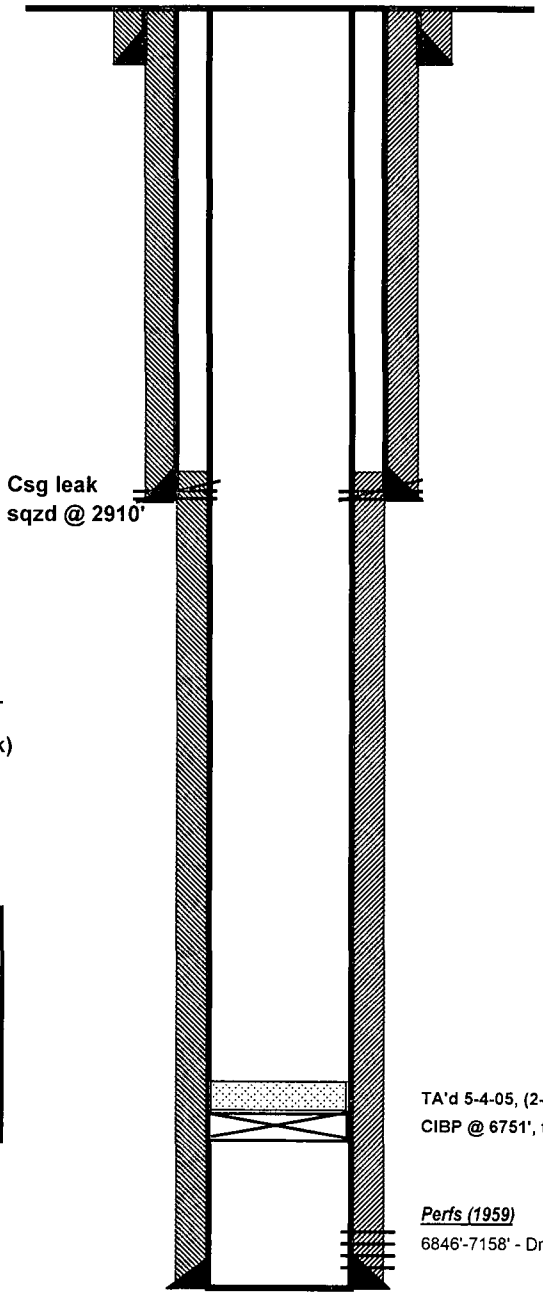
Intermediate Csg.

Size:	**8 5/8"**
Wt.:	**24#**
Set @:	**2901'**
Sxs Cmt:	**1200**
Circ:	**Yes**
TOC:	**Surface**

Production Csg.

Size:	**5 1/2"**
Wt.:	**4.7#**
Set @:	**7200'**
Sxs Cmt:	**650**
Circ:	**No**
TOC:	***3130' by TS**

(*TOC may have changed since they sqzd the csg leak)



Top Salt	1468'
Base Salt	2335'
Top Yates	2616'
Top San Andres	4008'
Top Glorieta	5202'
Top Blinebry	5640'
Top Tubb	6193'
Top Drinkard	6470'

PBTD: **7190'**
TD: **7200'**

Updated by: C J Haynie
Date: 4/29/2008

WELL DATA SHEET

Location: 660' FSL & 660' FEL
County: Lea **State:** New Mexico
Proposed Status: SWD
Disposal Formation: San Andres

Well Name: C. H. Lockhart Federal (NCT-1) #8 **Lease Type:** Federal
Sec: 18-P **Township:** 22S **Range:** 38E
Chevno FB3080 **API:** 30-025-12131 **Cost Center:** UCU41Z046

PROPOSED

Surface Csg.
Size: 13 3/8"
Wt.: 48#
Set @: 398'
Sxs cmt: 550
Circ: Yes
TOC: Surface
Hole Size: 17-1/2"

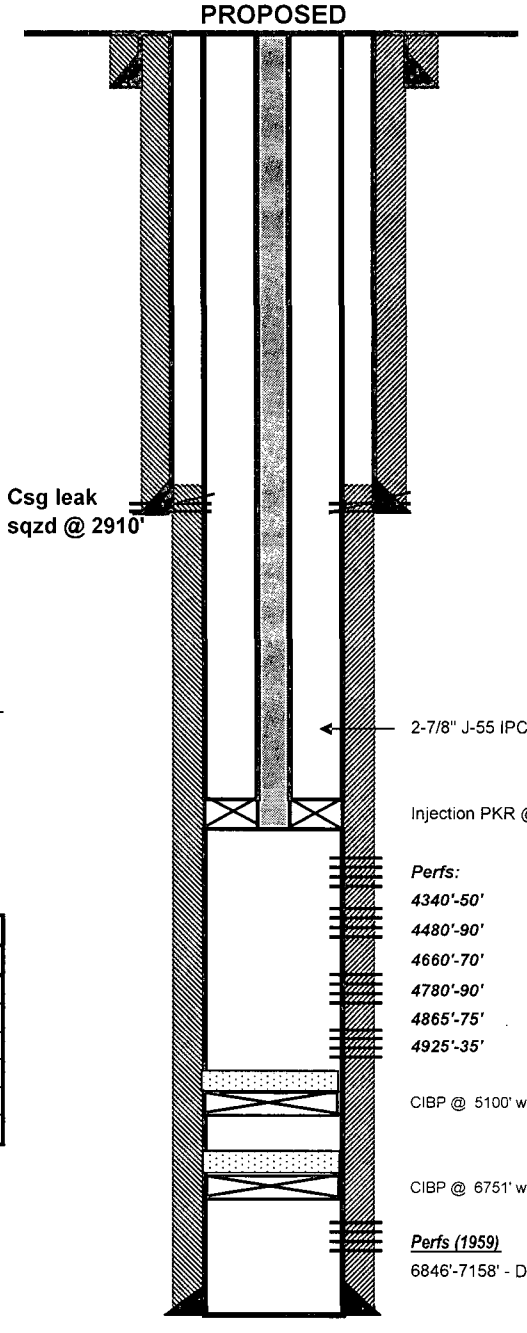
Intermediate Csg.
Size: 8 5/8"
Wt.: 24#
Set @: 2901'
Sxs Cmt: 1200
Circ: Yes
TOC: Surface
Hole Size: 12-1/4"

Production Csg.
Size: 5 1/2"
Wt.: 4.7#
Set @: 7200'
Sxs Cmt: 650
Circ: No
TOC: *3130' by TS
(*TOC may have changed since they sqzd the csg leak)
Hole Size: 7-7/8"

Top Salt	1468'
Base Salt	2335'
Top Yates	2616'
Top San Andres	4008'
Top Glorieta	5202'
Top Blinebry	5640'
Top Tubb	6193'
Top Drinkard	6470'

PBTD: 6716'
TD: 7200'

Updated by: C J Haynie
Date: 7/15/2008



KB: 3382'
DF: 3381'
GL: 3370'
Spud Date: 5/15/1959
Compl. Date: 6/7/1959

C.H. Lockhart Federal NCT-1 # 8
San Andres
T22S, R38E, Section 18
Job: Convert to SWD

Completion Procedure:

1. ***This procedure is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of 4/1/2008. Verify what is in the hole with the well file in the Eunice Field office. Discuss w/ WEO Engineer, Workover Rep, OS, ALS, and FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.***

2. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. Buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report. Disconnect flowline at wellhead and at battery and tag out of service.

3. MI & RU workover rig. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. Remove WH. Install BOP's and test as required.

4. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH with gauge ring and junk basket (for 5-1/2" 14# csg) to PBTD @ 6716'. POH.

5. GIH with 3-3/8" Predator guns and perforate the following interval with 4 JSPF at 120 degree phasing using 23 gram premium charges:

Top Perf	Bottom Perf	Net Feet	SPF	# Holes
4925	4935	10	4	40
4865	4875	10	4	40
4780	4790	10	4	40
4660	4670	10	4	40
4480	4490	10	4	40
4340	4350	10	4	40
			Total	240

Note: Use Welex Radioactive log Dated 6-7-1959 for depth correction

6. POH. RD & release WL.

7. RIH w/5-1/2" PPI packer w/SCV & 12' element spacing on 2-7/8 workstring. Test PPI packer in blank pipe. Mark settings.

8. MI & RU DS Services. Acidize perfs 4340-4935' with 4,800 gals 15% NEFE HCl acid* at a maximum rate of ½ BPM and a maximum surface pressure of 3500 psi as follows:

Perf Interval	Net Feet	Acid Volume	Rate	PPI Setting
4925-4935	10	800	1	4924-36'
4865-4875	10	800	1	4864-76'
4780-4790	10	800	1	4779-91'
4660-4670	10	800	1	4659-71'
4480-4490	10	800	1	4479-91'
4340-4350	10	800	1	4339-51'
Total	60	4800		

Displace acid with 8.6 PPG cut brine water -- do not over displace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services.
* Acid system to contain:

1 GPT A264	Corrosion Inhibitor
8 GPT L63	Iron Control Agents
2 PPT A179	Iron Control Aid
20 GPT U66	Mutual Solvent
2 GPT W53	Non-Emulsifier

9. Release PPI & PU to approximately 3600'. Set pkr @ 4250'. Fish SCV & SV. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered volumes, pressures, and/or swabbing fluid levels.

10. Open Well. Pump down tbg with reverse unit and establish injection rate into perfs at 3 BPM using 200 bbls 8.6 ppg cut brine water. Release PPI pkr. POH w/tbg and PPI pkr. LD PPI tool.

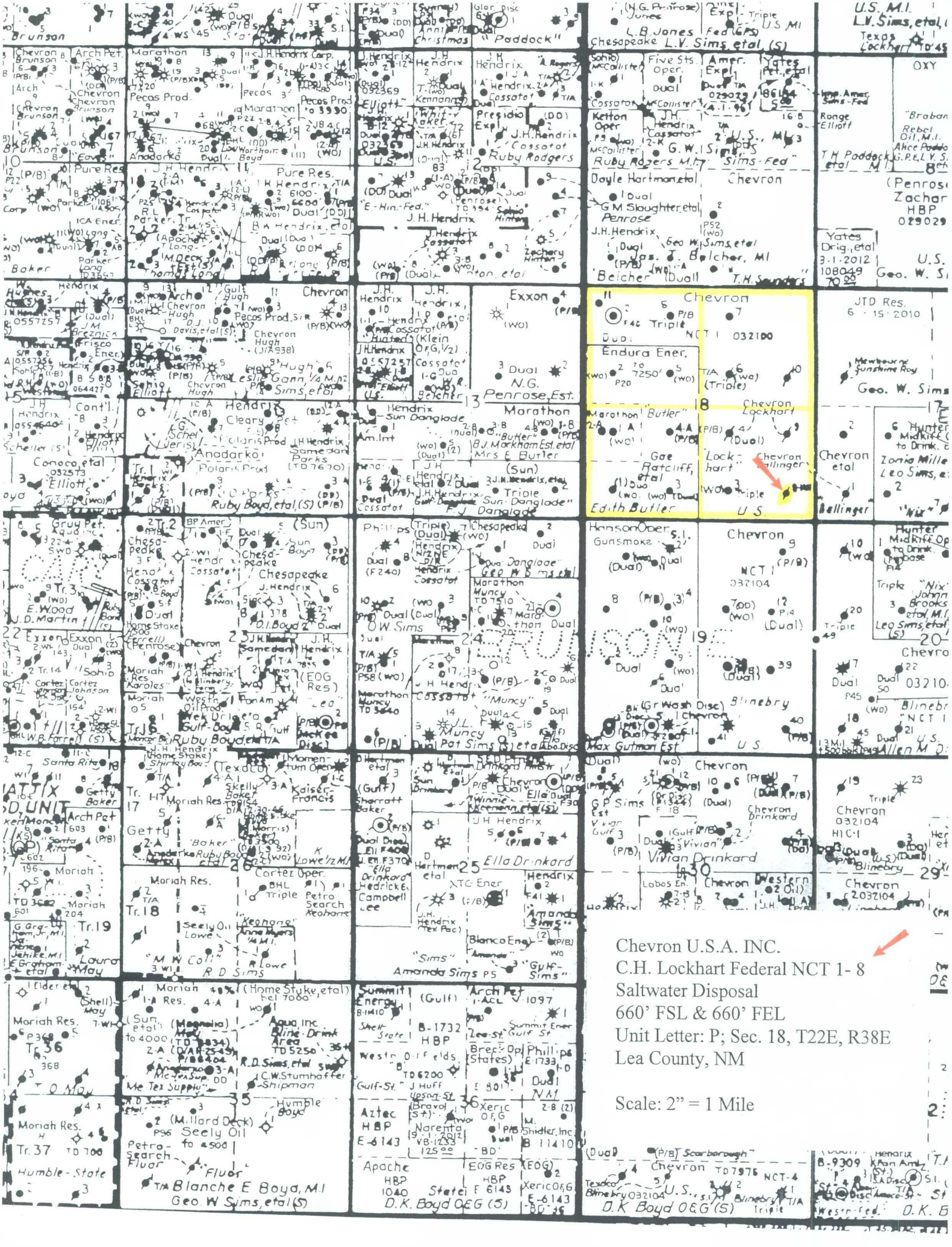
11. TIH w/new 5-1/2" nickel plated injection packer, with on-off tool w/1.78" profile nipple, and 135 jts 2-3/8" J-55 IPC tbg to 4250', testing to 5000 psi. Displace tbg-csg annulus with corrosion inhibited pkr fluid. Set PKR @ 4250'.

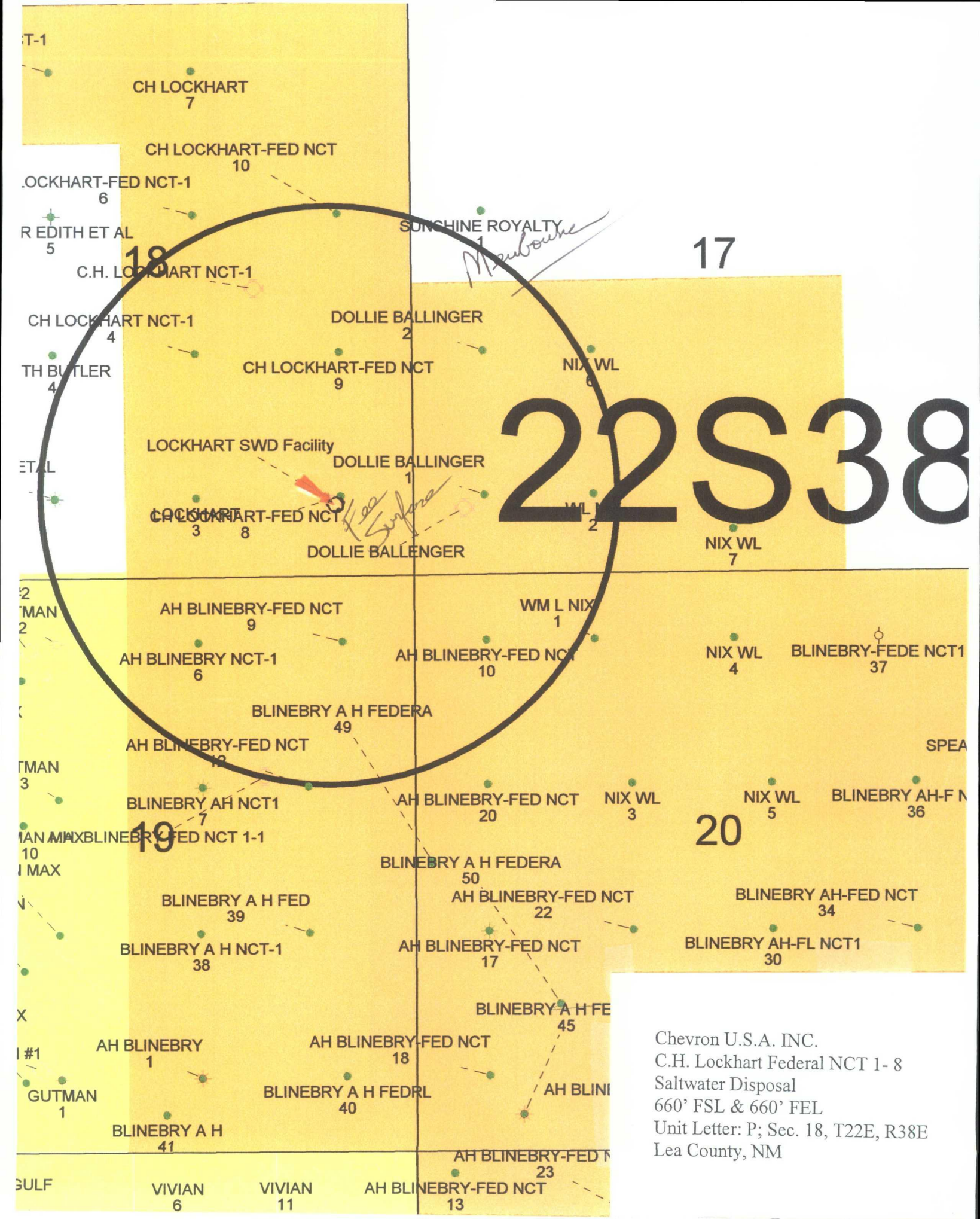
12. Pressure test csg and pkr to 500 psi. Pump down tbg with 8.6 ppg cut brine water to confirm injectivity. Remove BOP's and install WH. RD & release Key PU & RU.

13. Notify OCD and perform MIT test. Pressure test 5 ½" csg and pkr to 500 psi and record chart for NMOCD.

14. Turn well over to production. Report injection rates and pressures.

Engineer- Lonnie Grohman
432-687-7420 – Office
432-238-9233 – Cell


Chevron U.S.A. INC.
C.H. Lockhart Federal NCT 1- 8
Saltwater Disposal
660' FSL & 660' FEL
Unit Letter: P; Sec. 18, T22E, R38E
Lea County, NM
Scale: 2" = 1 Mile



Chevron U.S.A. INC.
C.H. Lockhart Federal NCT 1- 8
Saltwater Disposal
660' FSL & 660' FEL
Unit Letter: P; Sec. 18, T22E, R38E
Lea County, NM

Wells within 1/2 mile of C.H Lockhart Federal NCT 1 # 8

Commingled Well Information

WB	Well	API	Status	Field	Pool	Unit Letter	Sec	Location	Twnshp	Rng	Co	Operator
X	C.H. Lockhart Fed NCT 1- 3	30-025-12126	PR	Blinebry O&G	DHC R-4659	O	18	659' FSL & 1975' FEL	22S	38E	Lea	Chevron
X	C.H. Lockhart Fed NCT-1- 4	30-025-12127	HA	Paddock	49210	J	18	1978' FSL & 1975' FEL	22S	38E	Lea	Chevron
X	C.H. Lockhart Fed NCT 1- 8	30-025-12131	TA'd Injector	S. Brunson DRK-ABO	07900	P	18	660' FSL & 660' FEL	22S	38E	Lea	Chevron
X	C.H. Lockhart Fed NCT-1- 9	30-025-12132	No Current Production	S. Brunson DRK-ABO	07900	I	18	1980' FSL & 660' FEL	22S	38E	Lea	Chevron
X	C.H. Lockhart Fed NCT 1- 10	30-025-21104	P&A	S. Brunson DRK-ABO	07900	H	18	1980' FNL & 660' FEL	22S	38E	Lea	Texaco
X	Dollie Ballinger # 1	30-025-12118	P&A	S. Brunson DRK-ABO	07900	M	17	660' FSL & 660' FWL	22S	38E	Lea	Chevron
X	Dollie Ballinger # 2	30-025-20919	P&A	S. Brunson DRK-ABO	07900	L	17	1980' FSL & 660' FWL	22S	38E	Lea	Chevron
X	W L Nix # 2	30-025-21105	PR	S. Brunson DRK-ABO	07900	N	17	660' FSL & 1650' FWL	22S	38E	Lea	ETL Hydroncarbons Inc.
X	A H Blinebry- Fed NCT 1 # 6	30-025-12137	PR	S. Brunson DRK-ABO	07900	B	19	660' FNL & 1974' FEL	22S	38E	Lea	Chevron
X	A H Blinebry- Fed NCT 1 # 9	30-025-12139	PR	S. Brunson DRK-ABO	07900	A	19	660' FNL & 660' FEL	22S	38E	Lea	Chevron
X	A H Blinebry- Fed NCT 1 # 10	30-025-12142	ZA	East Brunson San Andres	8050	D	20	660' FNL & 660' FWL	22S	38E	Lea	Texaco
X	A H Blinebry- Fed NCT 1 # 12	30-025-12140	PR	Tubb Oil & Gas	60240	H	19	1980' FNL & 989' FEL	22S	38E	Lea	Chevron
X	Edith Butler ETAL # 3	30-025-12121	PR	Blinebry O&G	06660	N	18	660' FSL & 1980' FWL	22S	38E	Lea	Endura Energy LLC

WELL DATA SHEET

Location:	659' FSL & 1975' FEL		**Well Name:**	C. H. Lockhart Federal (NCT-1) # 3		**Lease Type:**	Federal
County:	Lea	**State:** New Mexico	**Sec:**	18-O	**Township:** 22S	**Range:**	38E
Current Status:	Producer		**Chevno:** FB3076		**API:** 30-025-12126	**Cost Center:**	UCU41Z046
Current Producing Formation(s):	DHC - R-4659; Paddock/Blinebry/Tubb						

CURRENT

Surface Csg.

Size:	13 3/8"
Wt.:	48# H-40
Set @:	391'
Sxs cmt:	475 sxs
Circ:	Yes
TOC:	Surface
Hole Size:	17-1/2"

Intermediate Csg.

Size:	8 5/8"
Wt.:	32# J-55
Set @:	2820'
Sxs Cmt:	2200 sxs
Circ:	Yes
TOC:	Surface

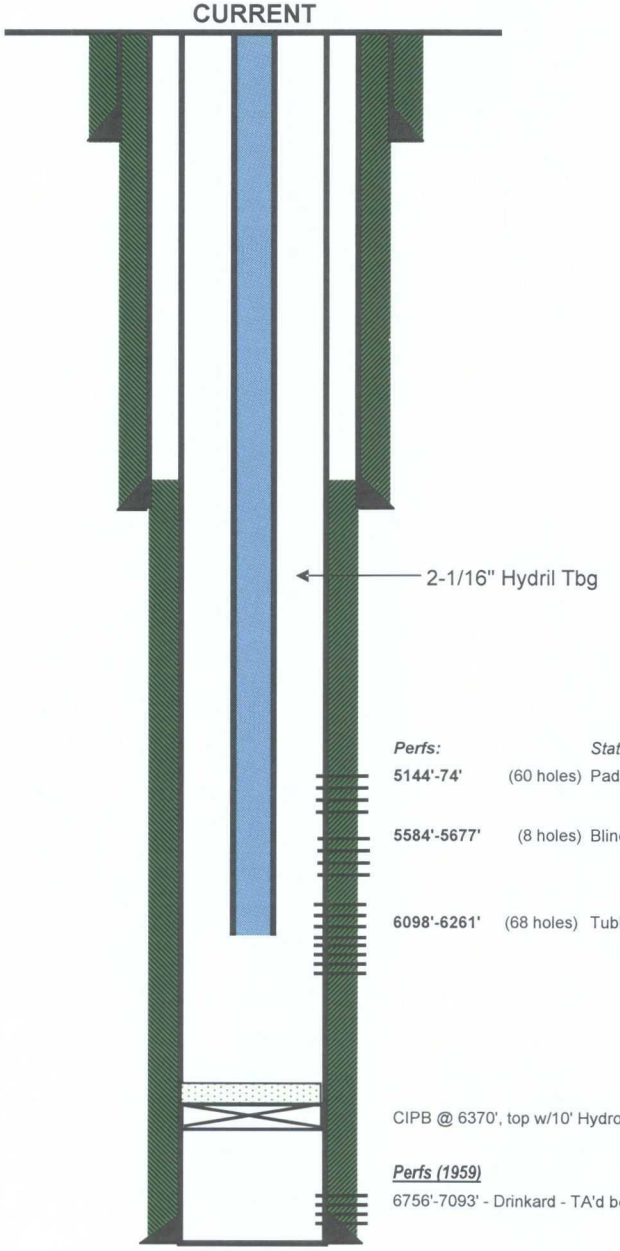
Production Csg.

Size:	5 1/2"
Wt.:	4.7#
Set @:	7125'
Sxs Cmt:	550 sxs
Circ:	No
TOC:	3340' by TS

Top of Salt	1450'
Base of Salt	2450'
Top of Yates	2550'
Top of San Andres	3980'
Top of Glorieta	5120'
Top of Blinebry	
Top of Tubb	6020'
Top of Drinkard	

PBTD:	6360'
TD:	7125'

Prepared by: C J Haynie
Date: 4/1/2008



KB:	
DF:	3371'
GL:	
Spud Date:	5/2/1953
Compl. Date:	7/2/1953

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

CURRENT WELL DATA SHEET

Field: Paddock
Location: 1978' FSL & 1975' FEL
County: Lea **State:** New Mexico
Current Status: PR
Current Producing Formation(s): Paddock
Initial Field/Formation(s): Drinkard - single string

Well Name: C. H. Lockhart Federal (NCT-1) #4
Sec: 18-FJ **Township:** 22S **Range:** 38E
Refno: FB3077 **API:** 30-025-12127
Lease Type: Federal
Cost Center: UCU41Z046
Type of well: Oil well

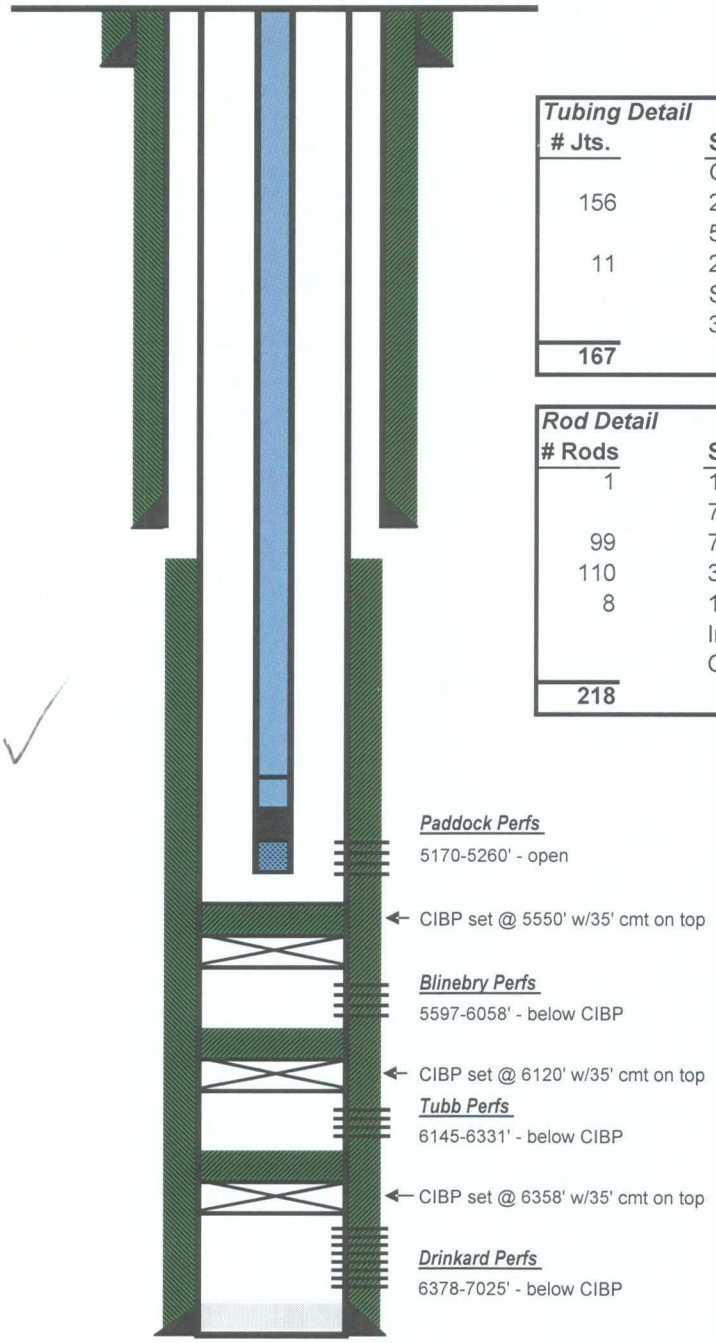
KB:
DF: 3359'
GL:
Spud Date: 6/15/1953
Compl. Date: 7/20/1953

Surface Csg.
Size: 13 3/8"
Wt.: 48#
Set @: 388'
Sxs cmt: 400
Circ: Yes
TOC: Surface

Intermediate Csg.
Size: 8 5/8"
Wt.: 24#
Set @: 2830'
Sxs Cmt: 1700
Circ: Yes
TOC: Surface

Production Csg.
Size: 5 1/2"
Wt.: 15.5#
Set @: 7130'
Sxs Cmt: 650
Circ: No
TOC: 3060' by TS

PBTD: 5515'
TD: 7150'



Tubing Detail **8/13/2001**

# Jts.	Size	Footage
	Original KB to Tubing Head Flange	8.50
156	2 3/8 4.7# 8rd J55	5,105.00
	5 1/2 X 2 3/8 TAC	3.00
11	2 3/8 4.7# 8rd J55	355.00
	SN	1.10
	3 1/2 MA	30.45
167	**EOT >>>**	**5,503.05**

Rod Detail **8/13/2001**

# Rods	Size	Footage
1	1 1/4 Polish Rod	22.00
	7/8" Pony Rods Grade D	10.00
99	7/8" Sucker Rods Grade D	2,475.00
110	3/4" Sucker Rods Grade D	2,750.00
8	1 1/2 Sinker Bars	200.00
	Insert Pump (20-150-HHBC-16-4)	
	Gas Anchor 1" X 6'	
218	**Total**	**5,457.00**

Remarks: See the well history and failure history attached

epared by: K M Jackson
Date: 3/2/2004

CURRENT WELL DATA SHEET

Field: Blinebry Oil & Gas **Well Name:** C. H. Lockhart Fed (NCT-1) #9 **Lease Type:** Federal
Location: 1980' FSL & 660' FEL **Sec:** 18 **Township:** 22S **Range:** 38E
County: Lea **State:** New Mexico **Refno:** FB3081 **API:** 30-025-12132 **Cost Center:** UCU464100
Current Status: SI **Working Int.** 100%
Current Producing Formation(s): Drinkard

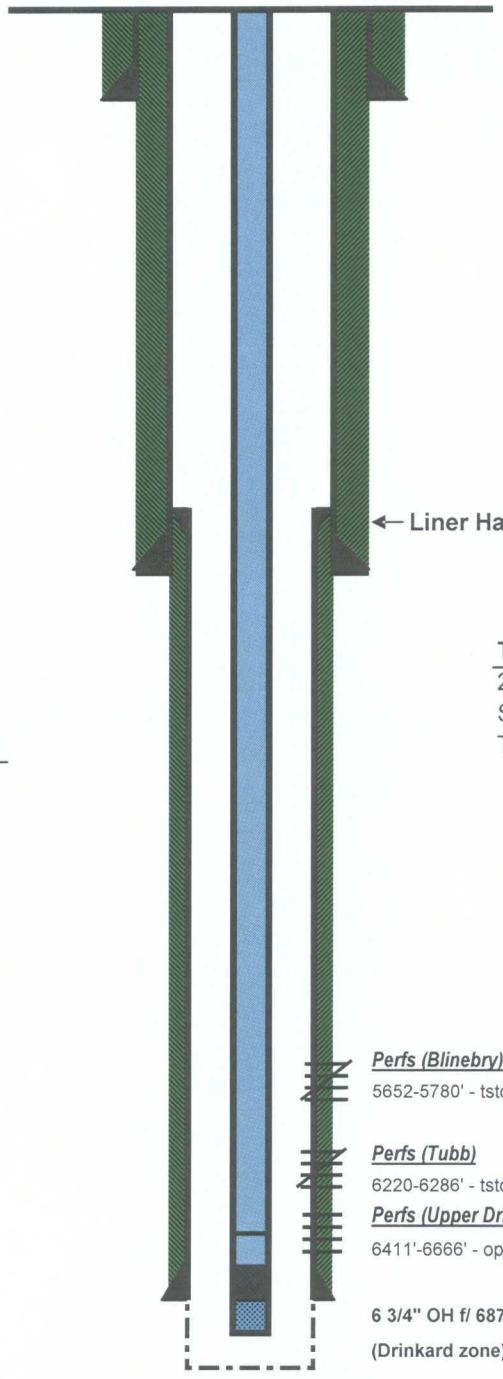
Surface Csg.
Size: 13 3/8"
Wt.: 48#
Set @: 390'
Sxs cmt: 500
Circ: Yes
TOC: Surface
Hole Size: 17 1/2"

Intermediate Csg.
Size: 9 5/8"
Wt.: 36#
Set @: 2925'
Sxs Cmt: 2000
Circ: Yes
TOC: Surface
Hole Size: 12 1/4"

Production Liner
Size: 7"
Wt.: 23#
Set @: 6875'
Sxs Cmt: 600
Circ: Sqz top & btm of liner
TOC: 2800'
Hole Size: 8 3/4"

Top Salt	1479'
Base Salt	2402'
Top Yates	2650'
Top San Andres	4100'
Top Glorieta	5225'
Top Blinebry	5640'
Top Tubb	6225'
Top Drinkard	6860'

PBTD:
TD: 7210'



KB: 3378'
DF: 3377'
GL: 3368'
Compl. Date: 3/24/1961

Tubing Detail (1976)
226 jts 2 3/8" J55 tbg
SN @ 7067'
Tbg landed @ 7102'

Prepared by: K M Jackson
Date: 7/11/2003

WELL DATA SHEET

Location:	1980' FNL & 660' FEL	**Well Name:**	C. H. Lockhart Federal (NCT-1) # 10			**Lease Type:**	Federal
County:	Lea	**State:** New Mexico	**Sec:**	18-H	**Township:** 22S	**Range:**	38E
Current Status:	Producer	**Chevno:** FB4571			**API:** 30-025-21104	**Cost Center:**	UCU41Z046
Current Producing Formation(s):	Drinkard Formation						

Slim Hole

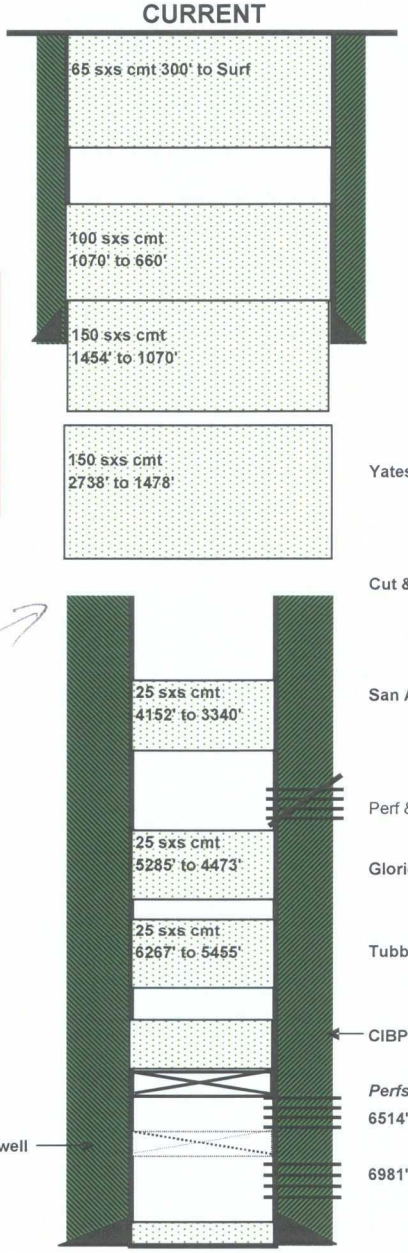
CURRENT

Surface Csg.

Size:	7-5/8"
Wt.:	24# H-40
Set @:	1350'
Sxs cmt:	600 sxs
Circ:	
TOC:	Surf
Hole Size:	9-7/8"

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

KB:	
DF:	3376'
GL:	3366'
Spud Date:	8/7/1964
Compl. Date:	9/11/1964



Production Csg.

Size:	2-7/8"
Wt.:	6.5# J-55
Set @:	7245'
Sxs Cmt:	800 sxs
Circ:	Yes
TOC:	Surf
Hole Size:	6-3/4"

Top of Salt	1414'
Base of Salt	2510'
Top of Yates	2705'
Top of San Andres	4102'
Top of Glorieta	5285'
Top of Blinebry	5705'
Top of Tubb	6267'
Top of Drinkard	6598'

PBTD:	7236'
TD:	7250'

Prepared by: C J Haynie
Date: 4/8/2008

Well: **Dollie Ballinger # 1** Pool Name: Brunson, DRK-ABO, S. Reservoir: Blinebry/DRK

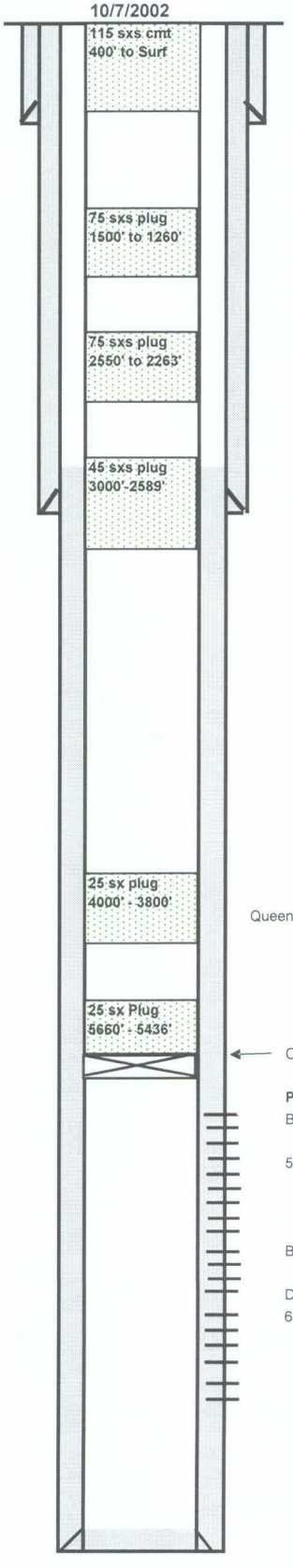
Location:
660' FSL & 660' FWL
Unit Letter: M
Section: 17
Township: 22S
Range: 38E
County: Lea State: NM

Elevations:

GL:	
KB:	
DF: 3376'	

Top of Salt	2495'
Top of Yates	2620'
Top of San Andres	4050'
Top of Glorieta	5190'
Top of Blinebry	5550'
Top of Tubb	6150'
Top of Drinkard	6800'
Top of Abo	

Current
Wellbore Diagram
P&A'd
10/7/2002



Well ID Info:
API No: 30-025-12118
Spud Date: 1-23-59
TD Date: 2-19-59
Compl. Date: 6-9-77
Operator: Chevron

Surf. Csg: 13-3/8" 48#
Set: @ 410' w/500 sxs cmt
Hole Size: 17-1/2"
Circ: Yes **TOC: Surface**

Intermidate Csg: 8-5/8" 32#
Set: @ 2859' w/1250 sxs cmt
Hole Size: 11"
Circ: Yes **TOC: Surface**

Queen Formation

Perfs: **Status:**
Blinebry/DRK w/1 JSPF Closed

5718' 5905'

Blinebry & Drk DHC

Drinkard
6800' - 7158'

Prod. Csg: 5-1/2" 17#
Set: 7200' @ w/750 sxs cmt
Hole Size: 7-7/8"
Circ: No **TOC: 2620'Surface**

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

PBTD: 7192'
TD: 7200'

Updated: 4-15-08

By: C. J. Haynie

WELL DATA SHEET

WELL: 2 **LEASE:** DOLLIE BALLENGER **FORMATION:** DRINKARD **FIELD:** S. BRUNSON

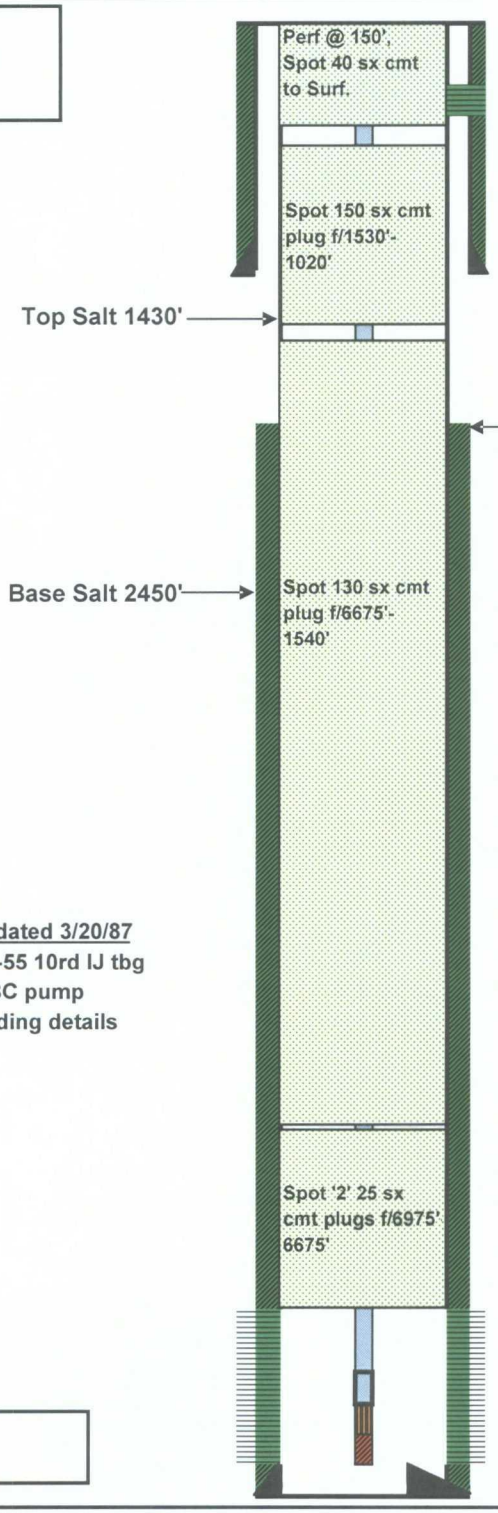
LOCATION: 1980' FSL 660' FWL **SECTION:** 17 **TOWNSHIP:** 22S **RANGE:** 38E **LOT:** L

COUNTY: LEA **STATE:** NEW MEXICO **API:** 30-025-20919 **REFNO:** FB4392 **STATUS:** P&A

P&A'd 5-22-07

Spud Date: 7/17/64
Released Rig: 8/10/64
Completed: 8/17/64

GL: 3366'
KB:
DF: 3377'



SURFACE CASING
7-5/8" 24# H-40 csg
Csg set @ 1350'
cmtd w/ 750 sx Class "C" cmt
Circ? Yes, to surface
11" hole

Tubing Detail from AFE dated 3/20/87
221 jts - 2-1/16", 3.25#, J-55 10rd IJ tbg
1-1/2" x 1-1/4" x 16' RWBC pump
(AFE did not include landing details for the tubing)

PRODUCTION CASING
2-7/8" 6.5# J-55 csg
Csg set @ 7200'
cmtd w/ 800 sx Class "C" cmt
Circ? No, TOC calc @ 1871'
6-3/4" hole

Perfs 2 JHPF:
7014', 7018', 7029', 7035'
7039', 7047', 7055', 7073'
7081', 7141', 7153', 7157'
7167', 7173' and 7182'
} **Drinkard - open**

PBTD @ 7188'
TD @ 7200'

Description of junk in hole:

Well: **W. L. Nix # 2** Field: S. Brunson, DRK-ABO Reservoir: DRK-ABO

Location:
660' FSL & 1650' FWL
Unit Letter: N
Section: 17
Township: 22S
Range: 38E
County: Lea State: NM

Elevations:

GL:	
KB:	3385'
DF:	

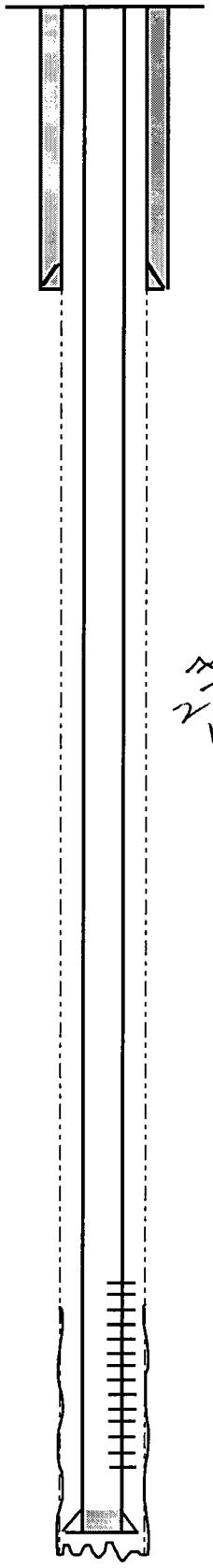
Top of Salt	1450'
Base of Salt	2547'
Top of Yates	2733'
Top of San Andres	4146'
Top of Glorieta	5360'
Top of Blinebry	5788'
Top of Tubb	6347'
Top of Drinkard	6680'

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

PBTD: 7198'
TD: 7220'

Updated: 4-14-08

Current Wellbore Diagram



By: C. J. Haynie

Well ID Info:
API No: 30-025-12143
Spud Date: 12-16-64
TD Date: 1-8-65
Compl. Date: 1-17-65
Operator: ETL Hydrocarbons Inc.

Single Tubeless Completion

Surf. Csg: 7-5/8" 15.28# Csg
Set: @ 1354' w/ 650 sxs cmt
Hole Size: 11"
Circ: Yes **TOC: Surface**

≈ 2740 Top of Salt Based on Cty. Lickhold Fed #10

Perfs:
Drinkard w/1 JSPF
7000', 7003', 7005'
7021', 7023', 7035'
7049', 7057', 7067',
7088', 7103', 7111',
7117', 7128', 7136'
7150', 7172', 7178',
7181', 7183', 7190'

Status:
6950'-7190'

Prod. Csg: 2-7/8" 6.5# Csg
Set: 7215' @ w/800 sxs cmt
Hole Size: 6-3/4"
Circ: yes **TOC: Surface**

WELL DATA SHEET

Location:	660' FNL & 1974' FEL		**Well Name:**	A H Blinebry - Fed NCT 1 # 6		**Lease Type:**	Federal
County:	Lea	**State:** New Mexico	**Sec:**	19-B	**Township:** 22S	**Range:**	38E
Current Status:	Producer		**Chevno:** FB3085		**API:** 30-025-12137	**Cost Center:**	
Current Producing Formation(s):	DHC - 692; DKR/Blinebry				Pool: 0660 & 07900		

CURRENT

Surface Csg.

Size:	**13 3/8"**
Wt.:	**48# H-40**
Set @:	**403'**
Sxs cmt:	**475 sxs**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**17-1/2"**

Intermediate Csg.

Size:	**8 5/8"**
Wt.:	**28# H-40**
Set @:	**2920'**
Sxs Cmt:	**1800 sxs**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**11"**

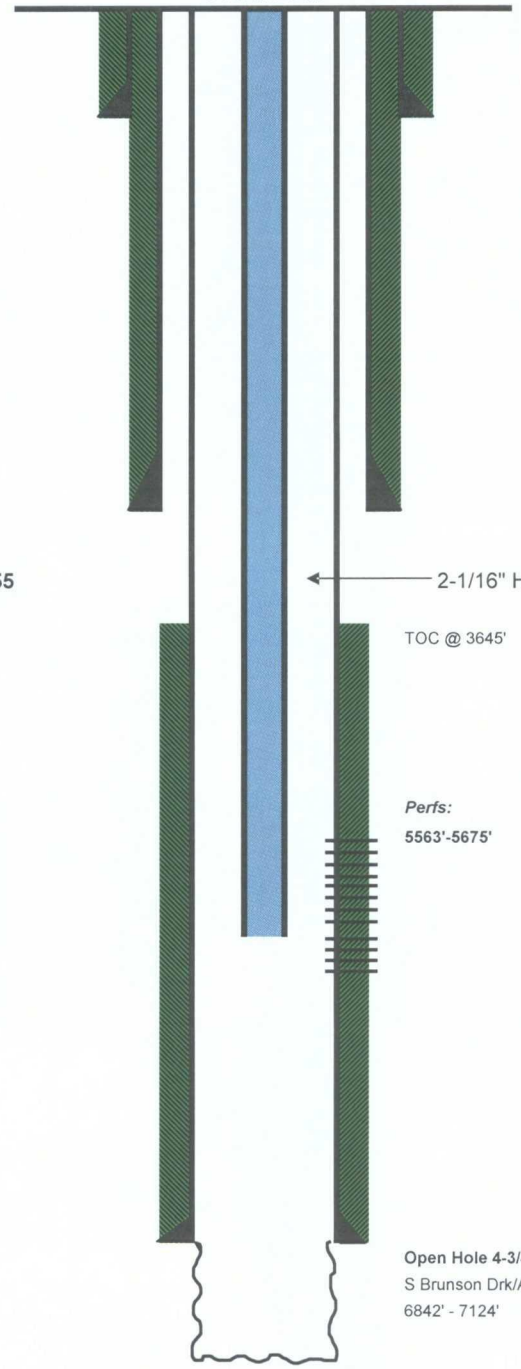
Production Csg.

Size:	**5 1/2"**
Wt.:	**17, 15.5, & 14# J-55**
Set @:	**6842'**
Sxs Cmt:	**500 sxs**
Circ:	**No**
TOC:	**3645' by Calc.**
Hole Size:	**7-7/8"**

Top of Salt	1450'
Base of Salt	2450'
Top of Yates	2550'
Top of San Andres	3980'
Top of Glorieta	5120'
Top of Blinebry	
Top of Tubb	6020'
Top of Drinkard	

TD: **7124'**

Prepared by: C J Haynie
Date: 4/21/2008



KB:	
DF:	3370'
GL:	3362'
Spud Date:	12/9/1953
Compl. Date:	1/20/1954

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

WELL DATA SHEET

Location:	660' FNL & 660' FEL		**Well Name:**	A H Blinebry - Fed NCT 1 # 9		**Lease Type:**	Federal
County:	Lea	**State:** New Mexico	**Sec:**	19-A	**Township:**	22S	**Range:**	38E
Current Status:	Producer		**Chevno:**	FB3086	**API:**	30-025-12139	**Cost Center:**	
Current Producing Formation(s):	Paddock					Pool: 49210		

CURRENT

Surface Csg.

Size:	13 3/8"
Wt.:	48# H-40
Set @:	416'
Sxs cmt:	500 sxs
Circ:	Yes
TOC:	Surface
Hole Size:	17-1/2"

Intermediate Csg.

Size:	8 5/8"
Wt.:	24# H-40
Set @:	2885'
Sxs Cmt:	1000 sxs
Circ:	Yes
TOC:	Surface
Hole Size:	11"

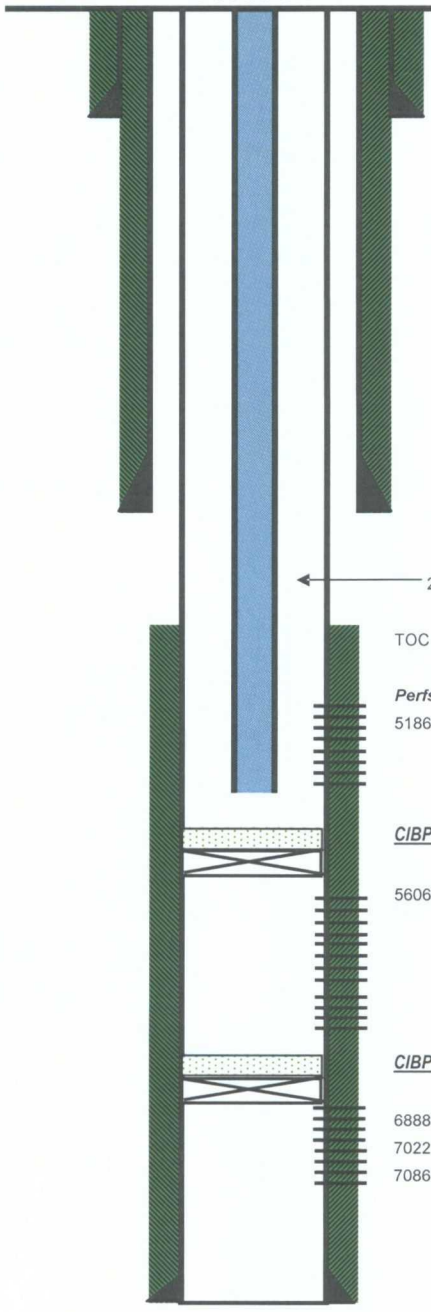
Production Csg.

Size:	5 1/2"
Wt.:	16# J-55
Set @:	7200'
Sxs Cmt:	650 sxs
Circ:	No
TOC:	3260' by Calc.
Hole Size:	7-7/8"

Top of Salt	
Base of Salt	
Top of Yates	2610'
Top of San Andres	4040'
Top of Glorieta	5200'
Top of Blinebry	5630'
Top of Tubb	6170'
Top of Drinkard	6500'

	5515'
TD:	**7200'**

Prepared by: C J Haynie
Date: 4/22/2008



KB:	
DF:	3384'
GL:	3370'
Spud Date:	4/16/1959
Compl. Date:	5/11/1959

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

WELL DATA SHEET

Location:	660' FNL & 660' FWL		**Well Name:**	A H Blinebry - Fed NCT 1 # 10		**Lease Type:**	Federal
County:	Lea	**State:** New Mexico	**Sec:**	20-D	**Township:** 22S	**Range:**	38E
Current Status:	Abandoned -8-28-97		**Chevno:**	FB3086	**API:** 30-025-12142	**Cost Center:**	
Current Producing Formation(s):	DRK				Pool:		

CURRENT

Surface Csg.

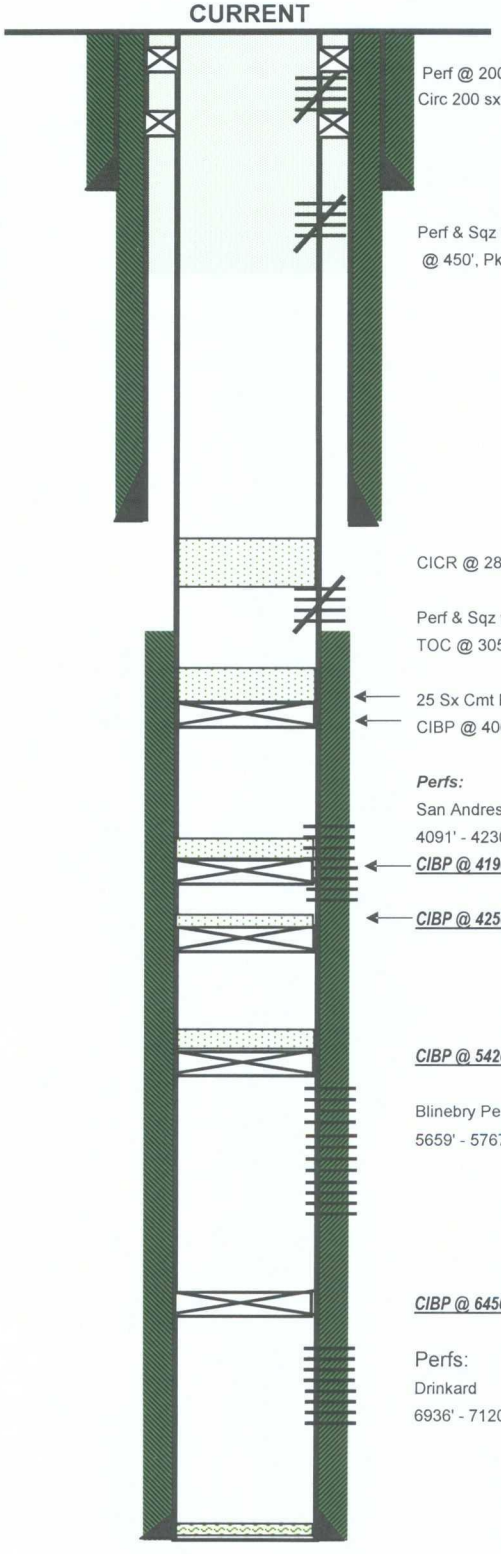
Size:	**13 3/8"**
Wt.:	**48# H-40**
Set @:	**400'**
Sxs cmt:	**500 sxs**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**17-1/2"**

Intermediate Csg.

Size:	**8 5/8"**
Wt.:	**32# H-40**
Set @:	**2881'**
Sxs Cmt:	**1010 sxs**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**11"**

Production Csg.

Size:	**5 1/2"**
Wt.:	**14# J-55**
Set @:	**7200'**
Sxs Cmt:	**650 sxs**
Circ:	**No**
TOC:	**3055' by Calc.**
Hole Size:	**7-7/8"**



Perf @ 200', Pkr @ 30'
Circ 200 sxs cmt

Perf & Sqz w/100 sxs cmt
@ 450', Pkr @ 200'

CICR @ 2800'

Perf & Sqz w/ 65 sxs cmt @ 2931'
TOC @ 3055'

25 Sx Cmt Plug 4000' to 3753'
CIBP @ 4000' FOR TA

Perfs:	***Status***
San Andres	
4091' - 4230'	

CIBP @ 4190' Top w/10' Hydromite

CIBP @ 4250' Top w/8' Hydromite

CIBP @ 5420' Top w/10' Hydromite

Blinebry Perfs	1 JSPF
5659' - 5767'	

CIBP @ 6450'

Perfs:

Drinkard	4 JSPF
6936' - 7120'	Below CIBP @ 6450'

KB:	
DF:	3389'
GL:	3376'
Spud Date:	5/15/1959
Compl. Date:	6/10/1959

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

Top of Salt	1519'
Base of Salt	2304'
Top of Yates	2664'
Top of San Andres	4100'
Top of Glorieta	5240'
Top of Blinebry	
Top of Tubb	6255'
Top of Drinkard	6617'

	4640'
TD:	**7200'**

Prepared by: C J Haynie
Date: 4/22/2008

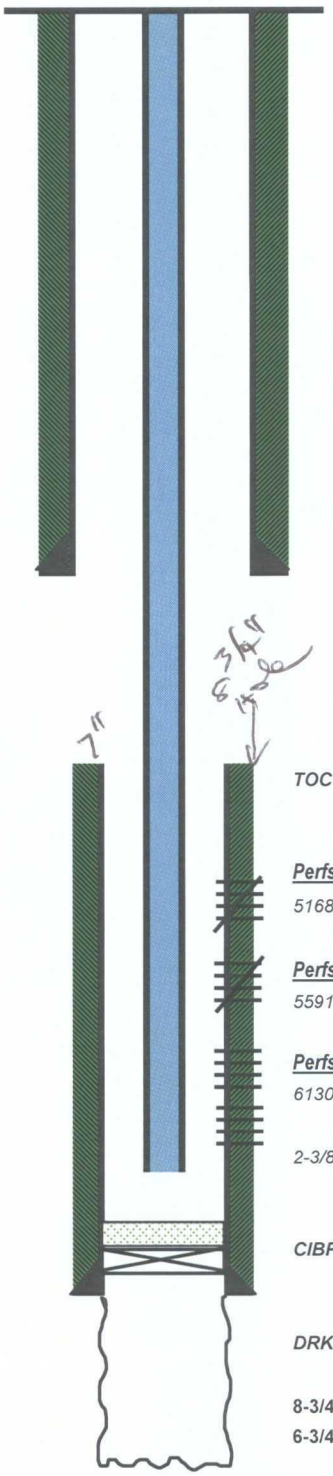
CURRENT WELL DATA SHEET

Field:	Blinebry Oil & Gas	**Well Name:**	A H Blinebry Fed NCT 1 # 12			**Lease Type:**	Federal
Location:	1980' FNL & 989' FEL	**Sec:**	19 - H	**Township:**	22S	**Range:**	38E
County:	Lea	**State:**	New Mexico	**Refno:**	FB3087	**API:**	30-025-12140
Current Status:	Producer	**Current Producing Formation(s):**	Tubb			**Cost Center:**	

Surface Csg.

Size:	**9 5/8"**
Wt.:	**32# H-40**
Set @:	**1299'**
Sxs cmt:	**700 sxs**
Circ:	**Yes**
TOC:	**Surface**
Hole Size:	**12 1/4"**

KB:	
DF:	3384'
GL:	
Spud Date:	8/3/1961
Rig Re:	9/1/1961
Compl. Date:	10/6/1961



Production Csg

Size:	**7"**
Wt.:	**23# J-55**
Set @:	**6850'**
Sxs Cmt:	**400 sxs**
Circ:	**Sqz top & btm of liner**
TOC:	**4360' by Calc**
Hole Size:	**8 3/4"**

Top Salt	1431'
Base Salt	2315'
Top Yates	2600'
Top San Andres	4028'
Top Glorieta	5168'
Top Blinebry	5590'
Top Tubb	6137'
Top Drinkard	6417'

PBTD:	**6799'**
TD:	**7200'**

Prepared by: C.J. Haynie
Date: 4/28/2008

WELL DATA SHEET

Location:	660' FSL & 1980' FWL		**Well Name:**	Edith Butler # 3		**Lease Type:**	
County:	Lea	**State:** New Mexico	**Sec:**	18-N	**Township:**	22S	**Range:**	38E
Current Status:	Producer		**Chevno:**	FB3085	**API:**	30-025-12121	**Operator:**	Endura Energy LLC
Current Producing Formation(s):	DHC -2076; Blinebry/TUBB/DRK-ABO				**Pools:**	6660/8644/7900		

CURRENT

Surface Csg.

Size:	13 3/8"
Wt.:	48#
Set @:	146'
Sxs cmt:	150 sxs
Circ:	Yes
TOC:	Surface
Hole Size:	17-1/2"

Intermediate Csg.

Size:	8 5/8"
Wt.:	28#
Set @:	2798'
Sxs Cmt:	750 sxs
Circ:	Yes
TOC:	Surface
Hole Size:	11"

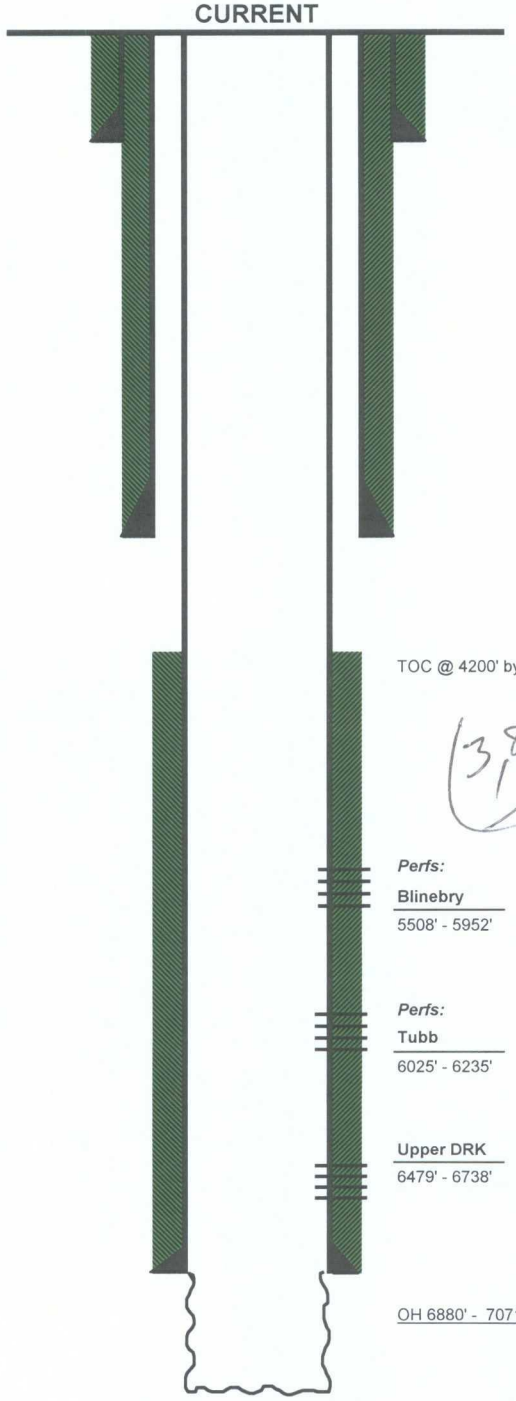
Production Csg.

Size:	5 1/2"
Wt.:	17 &15.5
Set @:	6880'
Sxs Cmt:	500 sxs
Circ:	No
TOC:	4200' by Calc.
Hole Size:	7-7/8"

Top of Salt	
Base of Salt	
Top of Yates	
Top of San Andres	
Top of Glorieta	5118'
Top of Blinebry	5498'
Top of Tubb	6103'
Top of Drinkard	6478'

TD: 7071'

Prepared by: C J Haynie
Date: 4/21/2008



KB:	
DF:	3359'
GL:	3348'
Spud Date:	1/20/1953
Compl. Date:	2/26/1953

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

TOC @ 4200' by Calculation

3,874' or HIGHER

Perfs:	*Status*
Blinebry	
5508' - 5952'	1 JSPF, 169 holes

Perfs:	*Status*
Tubb	
6025' - 6235'	2 JSPF

Upper DRK
6479' - 6738'

OH 6880' - 7071' (L DRK)

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

LABORATORY NO. 508-118
SAMPLE RECEIVED 5-13-08
RESULTS REPORTED 5-15-08

TO: Mr. Mike Howell
P.O. Drawer 29, Midland, TX 79714

COMPANY Chevron LEASE C.H. Lockhart Federal NCT-1
FIELD OR POOL
SECTION BLOCK SURVEY COUNTY STATE
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Submitted water sample - taken 5-12-08.
NO. 2
NO. 3
NO. 4
REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0840			
pH When Sampled				
pH When Received	7.23			
Bicarbonate as HCO_3	403			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	24,400			
Calcium as Ca	5,920			
Magnesium as Mg	2,333			
Sodium and/or Potassium	47,803			
Sulfate as SO_4	1,779			
Chloride as Cl	89,460			
Iron as Fe	2.5			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	147,697			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	0.070			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By Greg Ogden, B.S.

LATHAM PRINTING CO. - 333-1292

Jones, William V., EMNRD

From: Haynie, Carolyn (CHaynie) [Preferred Personnel] [CHAY@chevron.com]
Sent: Tuesday, July 29, 2008 6:00 AM
To: Jones, William V., EMNRD
Cc: Howell, Mike (MAHO); Lovell, Danny (LOVD)
Subject: SWD Application from Chevron
Attachments: HARRISON B-12 SWD Water Analysis.pdf

Good moning Will,
Below is the water sample for the Harrison B-12. This was requested for the pending Lockhart # 8 SWD.

Thanks,

Carolyn Haynie
Petroleum Engineer TA
Room 3337
687-7261

From: Nichols, Dexter [Baker Petrolite]
Sent: Monday, July 28, 2008 1:15 PM
To: Haynie, Carolyn (CHaynie) [Preferred Personnel]; Lovell, Danny (LOVD); Howell, Mike (MAHO)
Subject: FW: SWD Application from Chevron

<<HARRISON B-12 SWD Water Analysis.pdf>>
From: Haynie, Carolyn (CHaynie) [Preferred Personnel] [mailto:CHAY@chevron.com]
Sent: Tuesday, July 22, 2008 8:06 AM
To: Jones, William V., EMNRD
Cc: Lovell, Danny (LOVD); Howell, Mike (MAHO)
Subject: SWD Application from Chevron: C.H. Lockhart Federal NCT-1 Well No. 8 API No. 30-025-12131 Unit P, Sec 18, T22S R38E

Will,
For your information and update, there is not a water well within 1 mile of the Lockhart, so Danny Lovell, Chevron's Eunice Operations Supervisor, is requesting a test 250' West of the Harrison #12. I'll send you the results when it's available.

Thanks,
Carolyn Haynie
Petroleum Engineer TA
Room 3337
687-7261

From: Lovell, Danny (LOVD)
Sent: Thursday, July 17, 2008 1:33 PM
To: Howell, Mike (MAHO)
Cc: Haynie, Carolyn (CHaynie) [Preferred Personnel]
Subject: RE: SWD Application from Chevron: C.H. Lockhart Federal NCT-1 Well No. 8 API No. 30-025-12131 Unit P, Sec 18, T22S R38E

Hollis checked and there is no water well within 1 mile of the Lockhart well. There is one 250' west of the Harrison #12. Do you want me to take the sample to Cardinal labs? Thanks

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	CHEVRON MID CONTINENT LP	Sales RDT:	44218
Region:	PERMIAN BASIN	Account Manager:	DEXTER NICHOLS (505) 390-4356
Area:	EUNICE, NM	Sample #:	380592
Lease/Platform:	HARRISON LEASE	Analysis ID #:	83867
Entity (or well #):	B 12 SWD	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	FRESH WATER		

Summary	
Sampling Date:	07/22/08
Analysis Date:	07/25/08
Analyst:	STACEY SMITH
TDS (mg/l or g/m3):	786.6
Density (g/cm3, tonne/m3):	1.001
Anion/Cation Ratio:	1.0000003
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 380592 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**117.0**	**3.3**	**Sodium:**	**156.9**	**6.82**
Bicarbonate:	**230.0**	**3.77**	**Magnesium:**	**25.0**	**2.06**
Carbonate:	**6.0**	**0.2**	**Calcium:**	**47.0**	**2.35**
Sulfate:	**198.0**	**4.12**	**Strontium:**	**1.0**	**0.02**
Phosphate:			**Barium:**	**0.1**	**0.**
Borate:			**Iron:**	**0.1**	**0.**
Silicate:			Potassium:	5.5	0.14
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.44	Lead:		
pH used in Calculation:		**8.44**	Manganese:	0.025	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.87	8.06	-1.57	0.00	-1.64	0.00	-1.54	0.00	0.57	0.00	0.01
100	0	0.92	9.46	-1.57	0.00	-1.57	0.00	-1.52	0.00	0.43	0.00	0.02
120	0	0.99	11.56	-1.56	0.00	-1.48	0.00	-1.49	0.00	0.32	0.00	0.03
140	0	1.07	13.66	-1.53	0.00	-1.37	0.00	-1.44	0.00	0.24	0.00	0.04

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

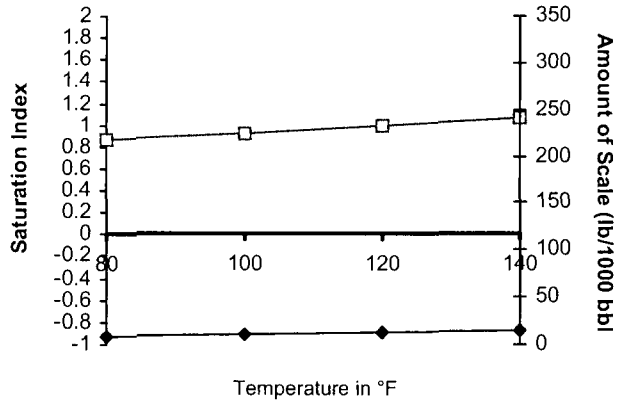
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

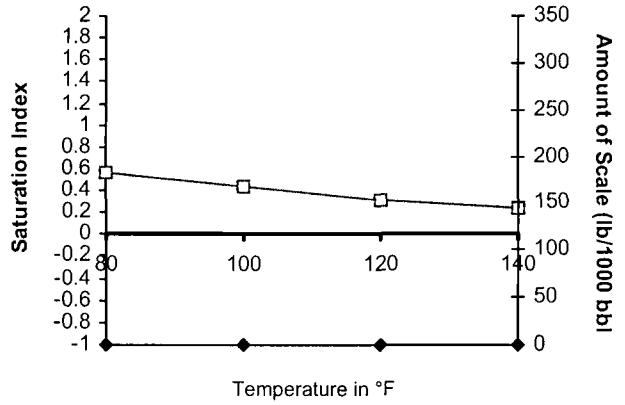
Scale Predictions from Baker Petrolite

Analysis of Sample 380592 @ 75 °F for CHEVRON MID CONTINENT LP, 07/25/08

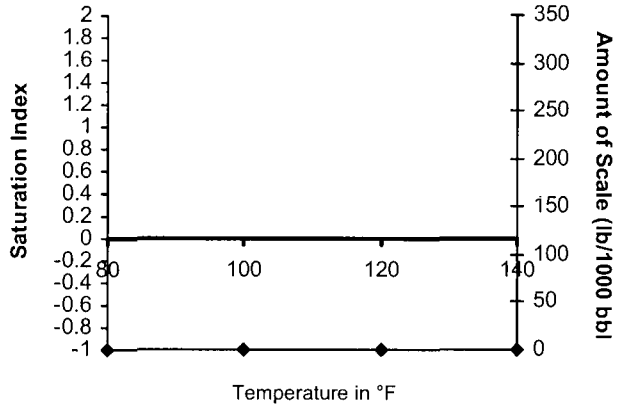
Calcite - CaCO3



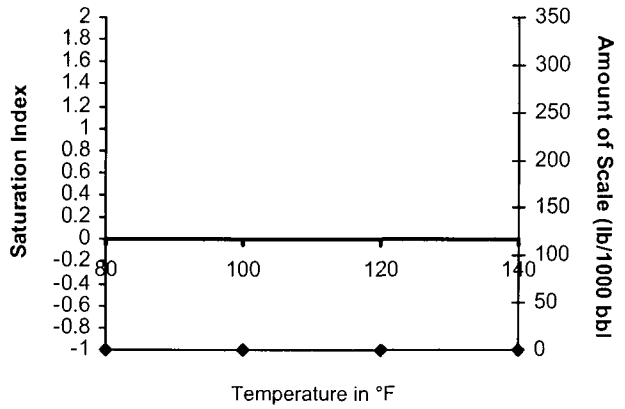
Barite - BaSO4



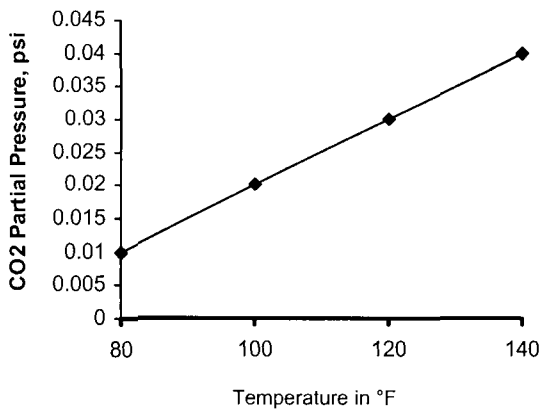
Gypsum - CaSO4*2H20



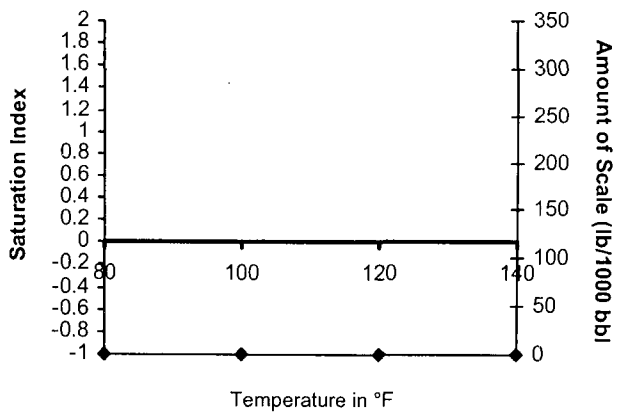
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1

weeks.

Beginning with the issue dated

May 3 2008

and ending with the issue dated

May 3 2008

Kathi Bearden

PUBLISHER

Sworn and subscribed to before me this 5th day of May 2008

Dora Montz

Notary Public.

My Commission expires
February 07, 2009
(Seal)

OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: _____

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
May 3, 2008

Notice is hereby given of the application of CHEVRON, U.S.A., INC., 15 Smith Road, Midland, TX 79705, Carolyn Haynie, (432) 687-7261, to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department, for the approval of the following injection well to be converted for the purpose of water disposal.

From: C.H. Lockhart Federal NCT-1 #8 Injection Well.

To: C.H. Lockhart Federal NCT-1 #8 Salt Water Disposal well API 30-025-12131.
Located:660'FSL & 660' FEL
Sec 18-T22S-R38E, Unit P, Lea Co., NM.

The injection formation is the San Andres located between the interval of 4200' MD to 5000' MD, below the surface of the ground. Expected maximum injection rate will be 5000 barrels per day and the expected injection pressure is 1500 PSI.

Interested parties should file objections or requests for hearing with the **Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505 within 15 days, of this notice.**
#24039

01102480000 02599982

CHEVRON USA INC.
15 SMITH ROAD
MIDLAND, TX 79705

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistance

Permian Business Unit
Chevron U.S.A. Inc.
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7558
chay@chevron.com

May 19, 2008

C.H. LOCKHART FEDERAL (NCT-1) # 8,
CONVERT TO SALT WATER DISPOSAL
LEA COUNTY, NEW MEXICO

Offset Operators:

For your information, Chevron USA Inc. as operator, filed an application with the New Mexico Oil Conservation Division to convert the C.H. Lockhart Federal (NCT-1) # 8, from a TA'd Drinkard formation Injection well, to a San Andres Salt Water Disposal well, located in Sec. 18, Unit Letter P, T22S, R38E, Lea County, NM.

Attached is an OCD Form C-108 with information relative to the water disposal conversion of the referenced well. A copy of the legal notice posted in the Hobbs News-Sun is included. The enclosed map highlights the location of the C.H. Lockhart Federal (NCT-1) # 8, in relation to your offset operations.

Any objections to this conversion must be sent to the **New Mexico Oil Conservation Division; 1220 South St. Francis Drive; Santa Fe, NM 87504**, within 15 days of receipt of this notification.

If you require additional information, please contact me, by telephone at 432-687-7261, or by email at: chay@chevron.com.

Sincerely,

Carolyn Haynie
NM PE Technical Assistant
Enclosure
cc: Lease file

OFFSET OPERATORS

ENDURA ENERGY
P.O. BOX 1637
HOBBS, NM 88240

MEWBOURNE OIL CO.
211 N. ROBINSON AVE. SUITE 2000
OKLAHOMA CITY, OK 73102

ETL HYDROCARBON
P.O. BOX 1413
ANDREWS, TX 79714

HANSON OPERATING CO.
P.O. BOX 1515
ROSWELL, NM 88202-1515

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistance

Permian Business Unit
Chevron U.S.A. Inc.
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7558
chay@chevron.com

May 19, 2008

Re: C.H. LOCKHART FEDERAL (NCT-1) # 8,
CONVERT TO SALT WATER DISPOSAL
LEA COUNTY, NEW MEXICO

S & D Ranch LLC
P.O. BOX 186
ENICE, NM 88231
(Surface Owner)

For your information, Chevron USA Inc. as operator, filed an application with the New Mexico Oil Conservation Division to convert the C.H. Lockhart Federal (NCT-1) # 8, from a TA'd Drinkard formation Injection well, to a San Andres Salt Water Disposal well, located in Sec. 18, Unit Letter P, T22S, R38E, Lea County, NM.

Attached is an OCD Form C-108 with information relative to the water disposal conversion of the referenced well. A copy of the legal notice posted in the Hobbs News-Sun is included. The enclosed map highlights the location of the C.H. Lockhart Federal (NCT-1) # 8.

Any objections to this conversion must be sent to the **New Mexico Oil Conservation Division; 1220 South St. Francis Drive; Santa Fe, NM 87504**, within 15 days of receipt of this notification.

If you require additional information, please contact me, by telephone at 432-687-7261, or by email at: chay@chevron.com.

Sincerely,

Carolyn Haynie
NM PE Technical Assistant
Enclosure
cc: Lease file

Jones, William V., EMNRD

From: Jones, William V., EMNRD

Sent: Tuesday, July 08, 2008 2:10 PM

To: 'Haynie, Carolyn (CHaynie) [Preferred Personnel]'

Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD; Warnell, Terry G, EMNRD

Subject: SWD Application from Chevron: C.H. Lockhart Federal NCT-1 Well No. 8 API No. 30-025-12131 Unit P, Sec 18, T22S R38E

Hello Carolyn:
After reviewing your application, I have the following comments and requests:

1) Is S&D Ranch the surface owner? Our system says that the surface is Fee and the subsurface is Fed near this wellbore
2) Please send copies of all electric logs run on this well including CBL or temp surveys to the Hobbs district office for scanning into the online system.
3) Please obtain a recent Fresh Water sample and analysis from any windmill or domestic waterwell in this area and send here for inclusion in this application. If none is available within 1 mile, say so.
4) Please send a statement as per item XII on C-108 signed by a geologist.
5) Q for the Geo: Why is the San Andres not productive here in this area? Do you have evidence of this? Is the proposed injection interval "lower" San Andres and therefore more likely to be wet?
6) For the Completions Engineer:
   a) As you know, if you want additional injection pressure in this well more than the standard: 0.2 psi/foot, then run a Step Rate Test and apply for more pressure.
   b) The permit will require another CIBP to be set within 200 feet of the lowermost injection perforation. However, if the well has already been perfed in the San Andres and tubing run, let us know?

RULE 40 appears fine - thanks for this!!!
I really liked your wellbore diagrams and the data you put on them - thank you. Let me know what software you used?

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

Injection Permit Checklist 2/8/07

SWD Order Number 1138 Dates: Division Approved _____ District Approved _____

Well Name/Num: C.H. Lockhart Federal (NCT-1) #8 Date Spudded: 5/15/59

API Num: (30-) 025-12131 County: Lea

UNIT P Footages 660 FSL/660 FEL Sec 18 Tsp 22S Rge 38E

Operator Name: Chevron USA, INC Contact Carolyn Hogue

Operator Address: 15 SMITH ROAD, MIDLAND, TX 79705

Current Status of Well: Was DRINKARD (NOW TA'D) Planned Work: convert To SA inj. SWD Inj. Tubing Size: 2 7/8 @ 4250'

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	17 1/2 13 3/8		350	CIRC
Intermediate	12 1/4 8 5/8		1200	CIRC
Production	7 7/8 5 1/2	7700'	650	3130 T.S.
Last DV Tool			(+ SQZED CSG Leak @ 2,910')	
Open Hole/Liner				
Plug Back Depth				

Diagrams Included (Y/N): Before Conversion ✓ After Conversion ✓

Checks (Y/N): Well File Reviewed ✓ ELogs in Imaging None - Send Logs

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/~~Potash~~			
~~Capitan Reef~~			
~~Cliff House, Etc.~~			
Formation Above	4008	SA, TOP	
Top Inj Interval	4340	SA	
Bottom Inj Interval	4935	SA	
Formation Below	5,202'	GLORIETA TOP	

R-3565 Core 3933 11/19/68 Wolfbone well

(4323 OGRID)

3/1395 = OK FA = OK

868 PSI Max. WHIP

NO Open Hole (Y/N)

NO Deviated Hole (Y/N)

Fresh Water: Depths: _____ Wells(Y/N) _____ Analysis included (Y/N): _____ Affirmative Statement XII

Salt Water Analysis: Injection Zone (Y/N/NA) _____ DispWaters (Y/N/NA) _____ Types: PDX, Blinebry, Tubb, PRK-ABO Comingled

Notice: Newspaper(Y/N) ✓ Surface Owner ~~BLM~~ ✓ Mineral Owner(s) BLM ✓

Other Affected Parties ETL HYD. / Enduro Energy / Mewbourn / Hanson Op. S & D Ranch

AOR/Repairs: NumActiveWells ~~39~~ 9 Repairs? NO Producing in Injection Interval in AOR _____

AOR Num of P&A Wells 3 Repairs? NO Diagrams Included? _____ RBDMS Updated (Y/N) ✓

Well Table Adequate (Y/N) ✓ AOR STRs: Sec _____ Tsp _____ Rge _____ UIC Form Completed (Y/N) ✓

New AOR Table Filename _____ Sec _____ Tsp _____ Rge _____ This Form completed ✓

Conditions of Approval: Sec _____ Tsp _____ Rge _____ Data Request Sent ✓

Set CIBP w/in 200' of 4935'

Record Perfed Fluid Level & report

if more pressure is needed, Run SRT.

AOR Required Work: ~~XII~~

Required Work to this Well: _____