

DATE IN 08/16/13	SUSPENSE	ENGINEER TOS	LOGGED IN 08/19/13	TYPE IPI	APP NO. PPRG1323160724
------------------	----------	--------------	--------------------	----------	------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

[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 SWD - 1287

Chevron
Skelly Unit No. 950
30-015-32437

[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

RECEIVED
2013 AUG 16 PM 2:24

[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 Havnie
Print or Type Name

Signature

NM Petro Eng Tech Assistant

Title

Date

chay@chevron.com
e-mail Address

8-14-13



Paul Brown
Petroleum Engineering

MidContinent Business Unit
Chevron North America
Exploration and Production
Company
15 Smith Road
Midland, TX 79705
Tel 432-687-7351
Fax 432-687-7871
PaulBrown@chevron.com

August 14, 2013

New Mexico Oil Conservation Division
Attn: Richard Ezeanyim
1200 South St. Francis Drive
Santa Fe, NM 87505

Injection Pressure Increase Request

Disposal Permit: Administrative Order SWD-1287
Maximum Wellhead Injection Pressure: 1,500 psi
Skelly Unit No. 950
API No. 30-015-32437
UL C, Sec 28-17S-31E, 973' FNL & 2226' FWL
Eddy County, NM

Dear Mr. Ezeanyim:

Chevron respectfully requests that the maximum allowable injection pressure for Skelly Unit 950 be increased to 1,750 psi.

Skelly Unit 950 has been a salt water disposal well since 2011 and has a gross injection interval of 7494' to 9780'. No initial step rate test was performed and the subject well was permitted to inject at a maximum pressure of 1500 psi (0.2 psi/ft gradient).

On July 23, 2013 a step rate test was performed on the subject well. The test identified the parting pressure of 1,750 psi at the surface. The step rate test is attached for your review.

Chevron is requesting that the maximum pressure be increased from its present 1,500 psi to 1,750 psi. Doing so will allow Chevron to utilize more of the full pressure capability of its injection facility.

Please contact me at 432-687-7351 if you have further questions.

Yours very truly,

Paul T. Brown
Petroleum Engineer
New Mexico Area
Midland, TX

1750 [Soft "Ac 1673"]
- 50 2 Fracture Pres

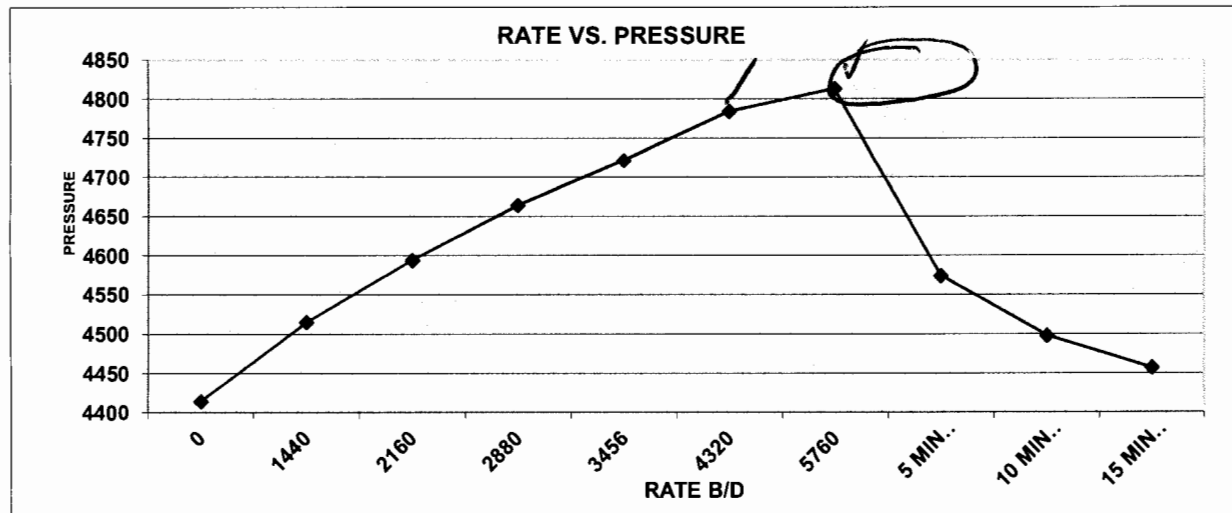
1700 psi
1700 psi / 7494 ft = 0.23



STEP RATE TEST

graywsi2@aol.com

RATE B/D	Date	Time	BH PRESS	SURF. PRESS	Comments
0	7/23/2013	11:45 AM	4414	700	
1440	7/23/2013	12:00 PM	4515	900	
2160	7/23/2013	12:15 PM	4594	1125	
2880	7/23/2013	12:30 PM	4664	1450	
3456	7/23/2013	12:45 PM	4722	1625	
4320	7/23/2013	1:00 PM	4784	1675	
5760	7/23/2013	1:15 PM	4813	1750	
5 MIN FALL OFF	7/23/2013	1:20 PM	4574	1350	
10 MIN FALL OFF	7/23/2013	1:25 PM	4498	1250	
15 MIN FALL OFF	7/23/2013	1:30 PM	4457	1225	
Company: CHEVRON			Recorded By: T. STANCZAK		
Well: SKELLY UNIT # 950			Witnessed By:		
Field: FREN			Truck Number: 104		
County: EDDY			District: LEVELLAND		
State: NEW MEXICO			Tool Number:		
Disposal: WATER			Test Type: STEP RATE TESTS		
Shut In Time: 1:15:00 PM			POSSIBLE SOFT FRAC @ 4320 B/D		
Total Shut In Time: 15 MIN.			1675 SURFACE PRESSURE		
Tubing Size: 3 1/2			4784 BOTTOM HOLE PRESSURE		
Open Hole: N/A			HARD FRAC @ 5760 B/D		
Perforations: 7494'-7848', 9362'-9780'			1750 SURFACE PRESSURE		
Plug Back Depth: N/A			4812 BOTTOM HOLE PRESSURE		



GWSi

CHEVRON

SKELLY UNIT # 950

July 23, 2013

JOB INFORMATION SHEET

Company Information	
Company Name:	CHEVRON
Address:	1500 LOUISIANA STREET HOUSTON, TX 77002
Well Information	
Well Name:	SKELLY UNIT # 950
Field – Pool:	FREN
Status:	DISPOSAL
Test Information	
Type of Test:	STEP RATE TEST
Gauge Depth:	7450'
Production Interval:	7494'-7848', 9362'-9780'
Production Through:	TUBING
Tubing Pressure:	1750 psi
Casing Pressure:	0 psi
Shut In Time	1:15 PM
Status:	DISPOSAL
Temperature @ Run Depth	93.13 degF
Surface Temperature:	89.46 degF
Comments	
POSSIBLE SOFT FRAC @ 4320 B/D; BHP @ 4784; SURFACE PRESSURE @ 1675 HARD FRAC @ 5760 B/D; BHP @ 4812; SURFACE PRESSURE @ 1750	

GRAY WIRELINE

CHEVRON

WELL INFORMATION SHEET

Well: SKELLY UNIT # 950

Well License:

Unique Well Identifier: 30-015-32437

Company: CHEVRON

Field: FREN

Location:

County: EDDY

Formation: ABO & WOLFCAMP

State: NEW MEXICO

Purpose: PRESSURE LOG

Country: USA

Permanent Datum KB

Elevation: 3784'

Vertical Zero Entity

Distance above PD: 17'

Open Hole Completion?

N

(Y)es or (N)o

Casing Liner Present?

N

(Y)es or (N)o

Flow Regime

T

(T)ubing, (A)nnular, or (C)asing

Total Depth: 12,095'

ID Borehole: 7.875"

Packer Depth: 7392'

ID Production Casing: 5"

Depth of whipstock: N/A

OD Production Tubing: 3.5"

Depth at which casing is landed: 12,095'

ID Production Tubing: 2.9"

Depth at which tubing is landed: 73.92'

ID Drill Pipe: N/A

Gradient Data Report

CHEVRON

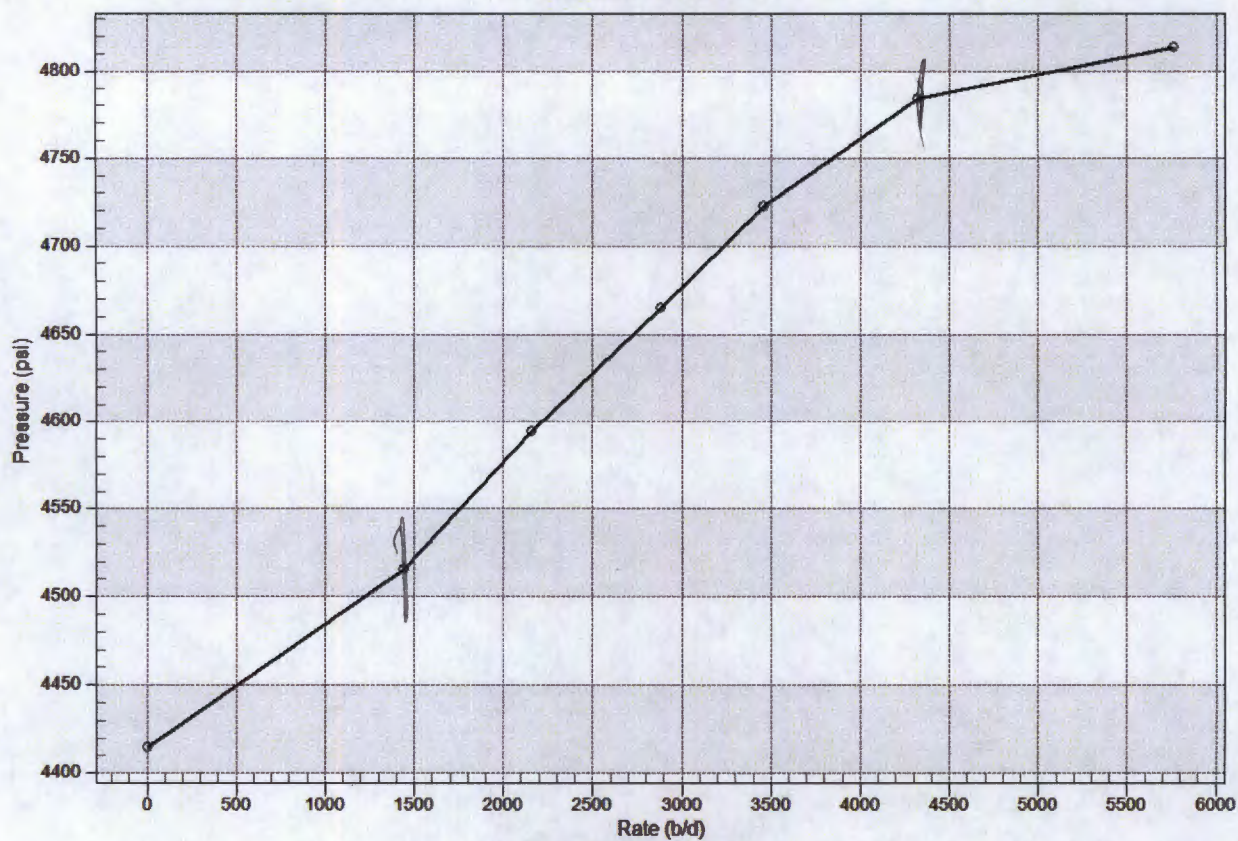
SKELLY UNIT # 950

Gradient Data Table

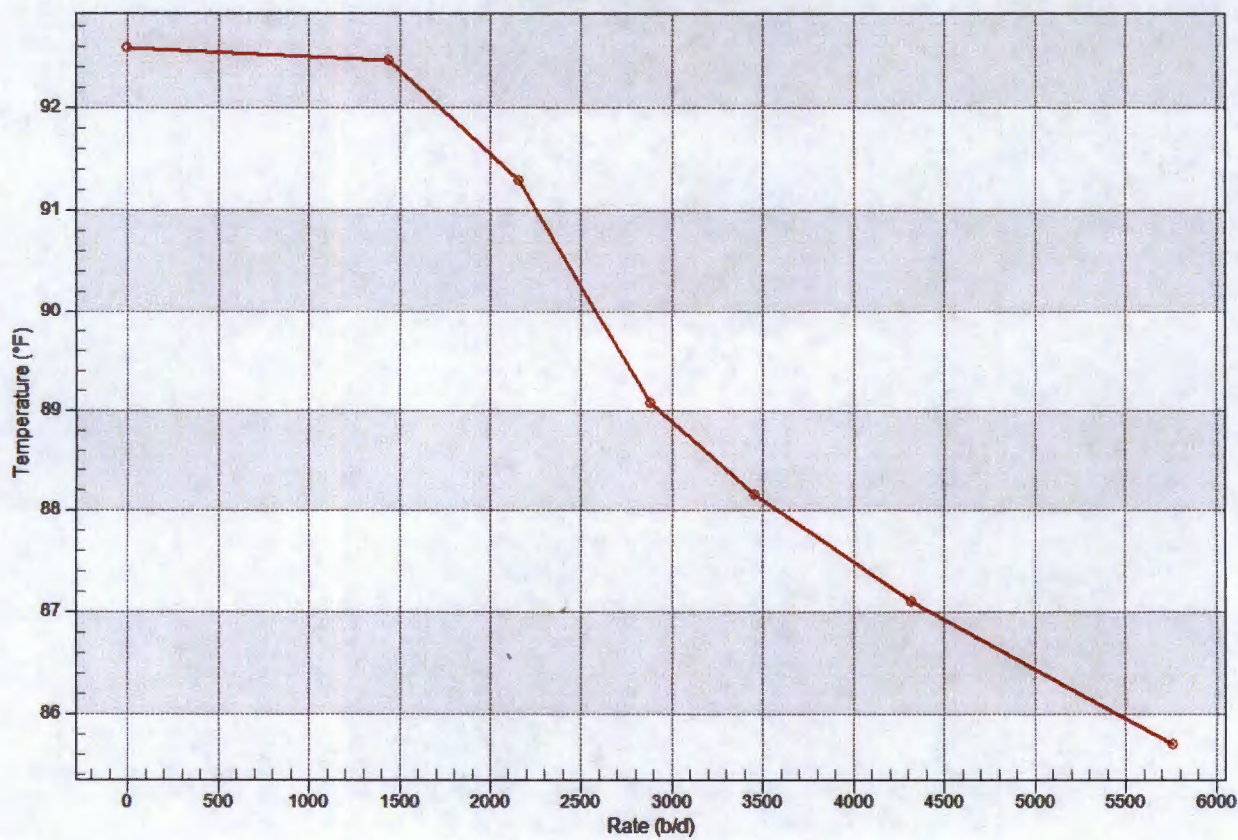
Rate b/d	Pressure psi	Temperature degF	Gradient psi/rate
0.00	4414.56	92.59	0.0000
1440.00	4515.09	92.47	0.0698
2160.00	4594.19	91.28	0.1099
2880.00	4664.68	89.07	0.0979
3456.00	4722.40	88.16	0.1002
4320.00	4784.02	87.11	0.0713
5760.00	4813.66	85.70	0.0206

GRAY WIRELINE

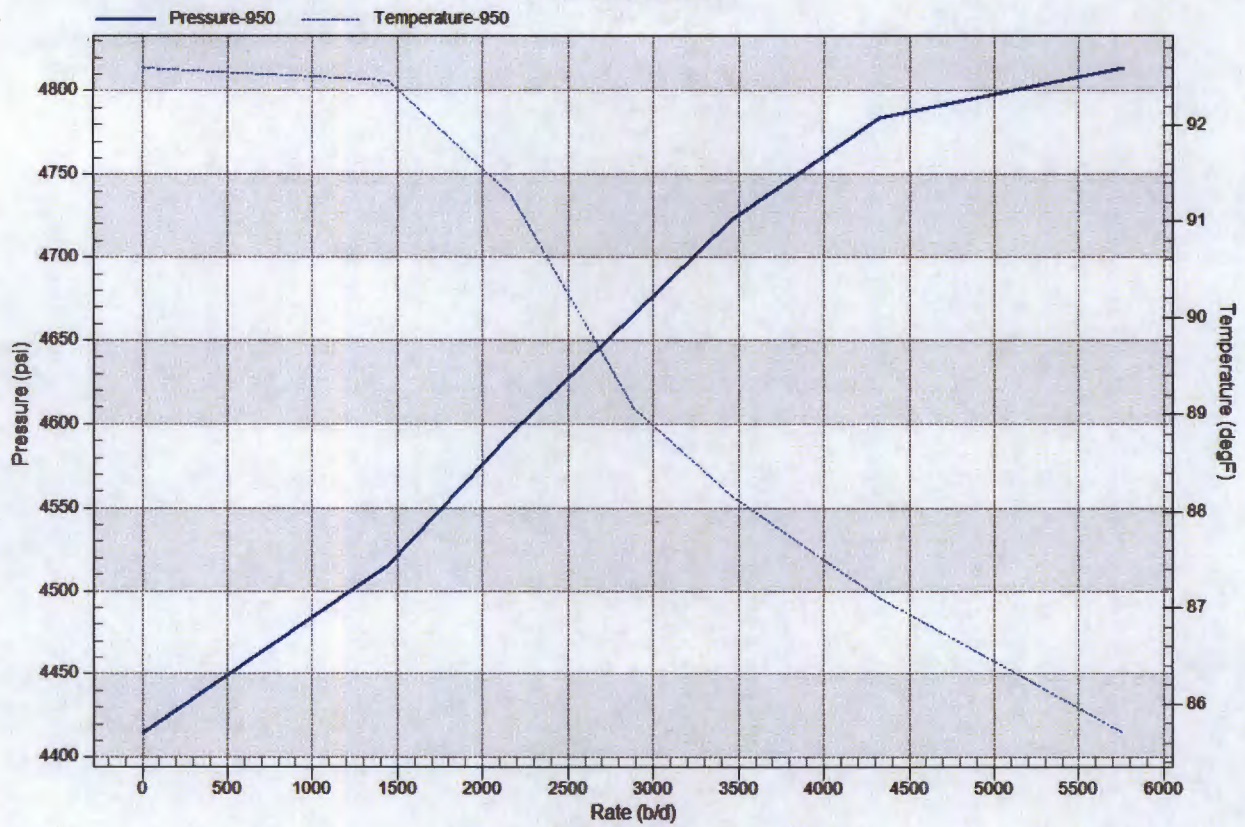
Pressure vs. Rate



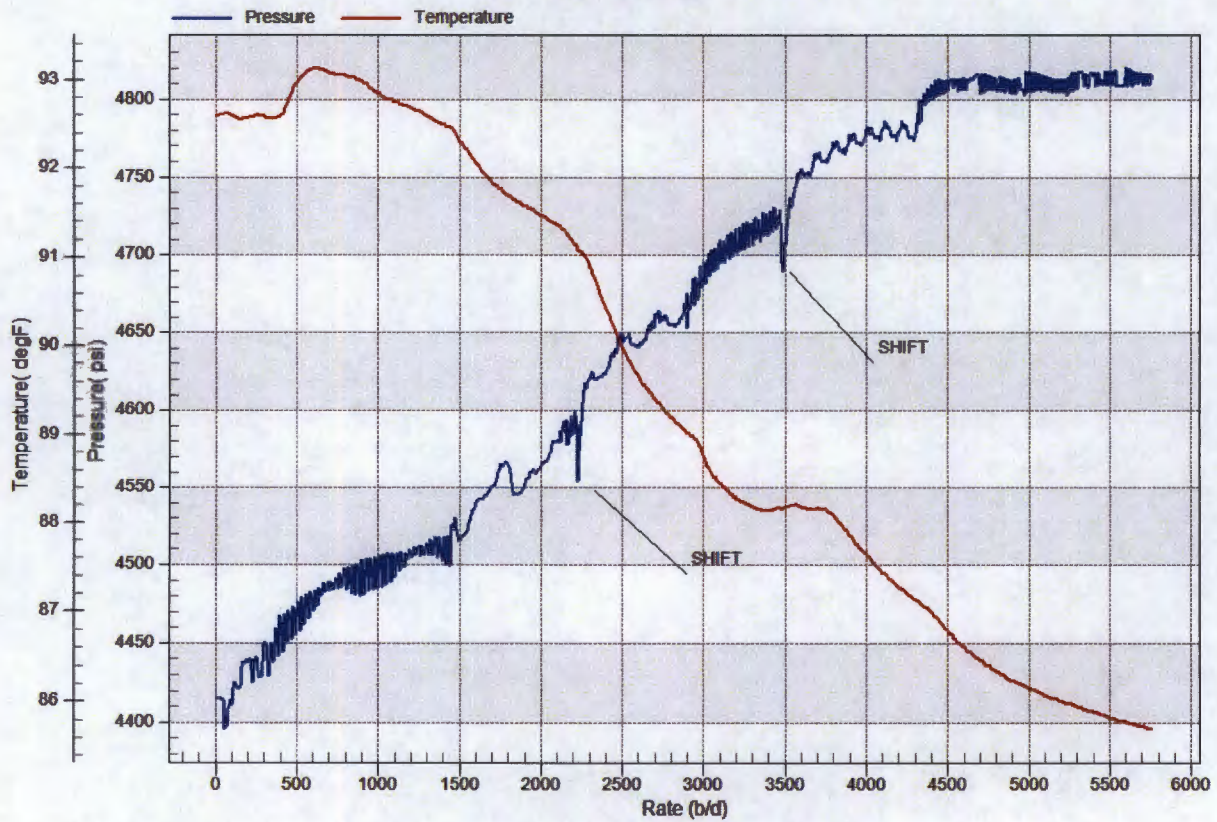
Temperature vs. Rate



Pres/Temp vs Rate



Pressure Log



Skelly Unit 950 Wellbore Diagram

Created: 02/22/13 By: PTBP
 Updated: _____ By: _____
 Lease: _____ Skelly Unit
 Field: _____ Fren
 Surf. Loc.: _____ 973' FNL & 2,226' FWL
 Bot. Loc.: _____
 County: Eddy St.: NM
 Status: _____ SWD well

Well #: 950 Fd./St. #: NM-98122
 API: 30-015-32437
 Surface Tshp/Rng: 17-S & 31-E
 Unit Ltr.: C Section: 28
 Bottom hole Tshp/Rng: _____
 Unit Ltr.: _____ Section: _____
 Cost Code: UCLK80100
 Chevno: HI1842

Surface Casing

Size: 13 3/8"
 Wt., Grd.: 48#, H-40
 Depth: 450'
 Sxs Cmt: 700 sx
 Circulate: 374 sx
 TOC: Surface
 Hole Size: 17 1/2"

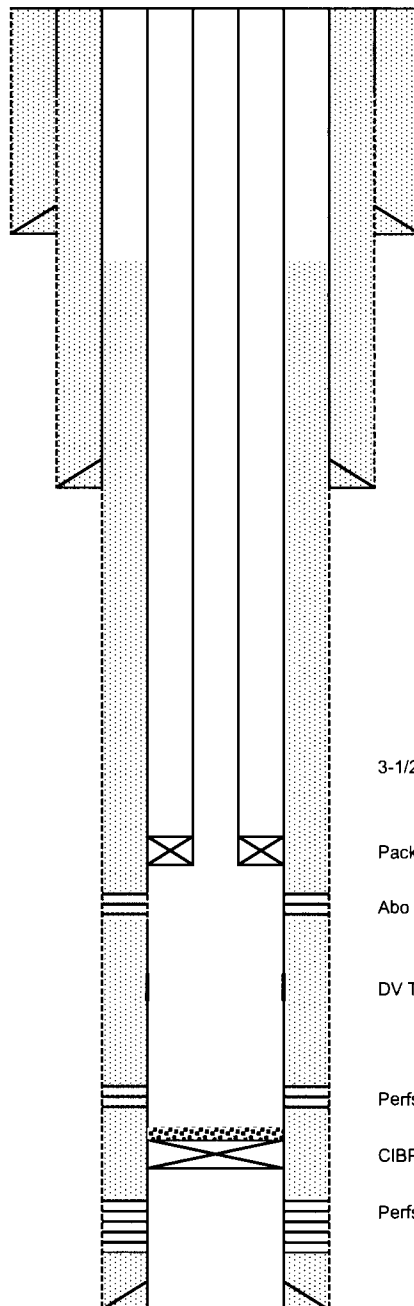
Intermediate Casing SW

Size: 8 5/8"
 Wt., Grd.: 32#, J-55
 Depth: 4500'
 Sxs Cmt: 2570 sx
 Circulate: 500 sx
 TOC: Surface
 Hole Size: 12 1/4"

Production Casing

Size: 5 1/2"
 Wt., Grd.: 17#, C-95&N-80
 Float Shoe, 2 jts 5 1/2" 17# C-95, Float
 Collar, 39 jts 5 1/2" 17# C95 (1707.63')
 followed by 42 jts 5 1/2" 17# N-80, DV Tool
 @8500', 196 jts 5 1/2" 17# N-80 csg, set @
 12095.
 Depth: 12095'
 Sxs Cmt: 1720 sx
 Circulate: No
 TOC: 1390' by CBL
 Hole Size: 7 7/8"
 DV Tool @ 8500'

KB: 3801'
 DF: 3800'
 GL: 3784'
 Spud Date: 12/19/02
 Comp. Date: 03/24/03



3-1/2" L-80 TK-99 IPC Tubing

Packer @ 7408' w/ on-off tool

Abo Perfs: 7494'-7848'

DV Tool @ 8500'

Perfs: 9362'-9780'

CIBP @ 10370'

Perfs: 11796'-11805'

PBTD: 10,246 MD
 TD: 12,095 MD