State of New Mexico Energy, Minerals and Natural Resources Department

Form C-103

District a lice			Revised 1-1-89		
DISTRUCT I	OIL CONSERV	ATION DIVISION	WELL API NO.		
P.O. Box 1980, Hobbs, NM 88240		ox 2088	30-025-36740		
DISTRICT II					
P.O. Box Drawer DD, Artesia, NM 88210	Santa Fe, New I	Mexico 87504-2088	5. Indicate Type of Lease STATE ☐ FEE ✓		
DISTRICT III					
1000 Rio Brazos Rd., Aztec, NM 87410			6. State Oil / Gas Lease No.		
	TICES AND REPORTS OF	NWFILS			
(DO NOT USE THIS FORM FOR PRO			7. Lease Name or Unit Agreement Name		
	RVOIR. USE "APPLICATION		C.L. HARDY		
OII	C-101) FOR SUCH PROPOS	ALS.	- 0.2.174(0)		
1. Type of Well: OIL GAS WELL WELL					
2. Name of Operator	OTTIER	· · · · · · · · · · · · · · · · · · ·	8. Well No.		
CHEVRON L	JSA INC		6		
3. Address of Operator 15 CMITL D			9. Pool Name or Wildcat		
15 SMITH R	RD, MIDLAND, TX 79705		PENROSE SKELLY GRAYBURG		
4. Well Location					
Unit Letter K :	1345' Feet From The	SOUTH Line and 1385'	Feet From The WEST Line		
	24.0				
Section 20	_ Township <u>21-S</u>	Range <u>37-E</u>	NMPM <u>LEA</u> COUNTY		
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	10. Elevation (Show whether I	DF. RKB. RT.GR. etc.)			
	(4)	3492'	The state of the s		
11. Check A	ppropriate Box to Indica	ate Nature of Notice, Repo	ort, or Other Data		
NOTICE OF INTENTION	• • •	4			
NOTICE OF INTENTIO			SUBSEQUENT REPORT OF:		
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING		
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING	OPERATION PLUG AND ABANDONMENT		
PULL OR ALTER CASING		CASING TEST AND CEN	MENT JOB		
OTHER: ADD PERFS, ACIDI	ZE & SCALE SQUEEZE	OTHER:			
proposed work) SEE RULE 1103.			it dates, including estimated date of starting any		
CHEVRON U.S.A. INC. INTENDS TO ADD PERFS IN THE GRAYBURG FORMATION, ACIDIZE, & SCALE SQUEEZE.					
THE CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.					
THE INTENDED PROCEDURE IS ALS	O ATTACHED.				
A PIT WILL NOT BE USED FOR THIS	WORKOVER. (JUST ADDIN	IG PERFS) (STEEL FRAC TAI	NK)		
			18910777273 A 16 17 18 18 17 18 17 18 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 18 17 18 18 17 18 18 17 18 18 17 18 18 17 18 18 17 18 18 17 18 18 18 18 18 18 18 18 18 18 18 1		
TYPE OR PRINT NAME (This space for State Uge) APPROVED AUDITIONS OF APPROVAL, IF ANY:	enise Pinkerton	Regulatory Specialist SENTATIVE II/STAFF MAN	DATE 6/20/2005 Telephone No. 432-687-7375		

WELL DATA SHEET

FIELD: Penrose Skelly WELL NAME: C. L. Hardy # 6 **FORMATION: Grayburg** LOC: 1345' FSL & 1385' FWL SEC: 20 GL: 3492' **CURRENT STATUS:** TOWNSHIP: 21S **COUNTY: Lea** DF: API NO: 30-025-36740 RANGE: 37E STATE: NM REFNO: HP6001 LOT: SAP: UCU493600 **CURRENT Surface Casing** 8-5/8" 24# K-55 Spud Date: 8/17/2004 11" hole to 405" **Date of Completion:** Set @ 405' w/250 sx cmt Initial Completion: Grayburg Circ cmt to surface <u>Perfs</u> **Status** 3673-77 Grayburg - Open 3690-92 Grayburg - Open 3702-05 Grayburg - Open 3712-16' Grayburg - Open 3720-23' Grayburg - Open 3728-34' Grayburg - Open 3742-46' **Grayburg - Open** Tbg Detail: 3764-72' Grayburg - Open 2 7/8" Dump Valve @ 3872' 3782-88' Grayburg - Open 2 its. 2 7/8" tbg 3800-061 **Grayburg - Open** Cavins Desander @ 3788' 3812-16 **Grayburg - Open** 2 7/8" x 4' tbg sub 3820-28' Grayburg - Open SN @ 3783' 3834-36' Grayburg - Open 1 jt. 2 7/8" EUE 8R J-55 IPC tbg 3840-46' Grayburg - Open 6 jts. 2 7/8" EUE 8R J-55 tbg 3854-58' Grayburg - Open TAC @ 3561' 3863-67 Grayburg - Open 114 jts. 2 7/8" EUE 8R J-55 tbg 3879-91' Grayburg - Open **Production Casing** 5-1/2", 15.5# K-55 7-7/8" hole to 4051' Set @ 4005' w/1000 sx cmt PBTD-3990 TOC: 1800' by CBL

TD 4051

WELL DATA SHEET

FIELD: Penrose Skelly

WELL NAME: C. L. Hardy # 6

LOC: 1345' FSL & 1385' FWL

TOWNSHIP: 21S RANGE: 37E

LOT:

SEC: 20 COUNTY: Lea STATE: NM

GL: 3492'

DF:

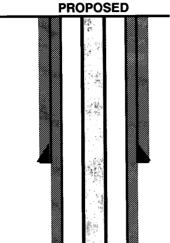
CURRENT STATUS: API NO: 30-025-36740 REFNO: HP6001

FORMATION: Grayburg

SAP: UCU493600

Surface Casing

8-5/8" 24# K-55 11" hole to 405' Set @ 405' w/250 sx cmt Circ cmt to surface



Spud Date: 8/17/2004 **Date of Completion:**

Initial Completion: Grayburg

Tbg Detail: BP @ 3900' 1 jt. 2 7/8" tbg 2 7/8" x 4' perf tbg sub

SN @ 3865' 1 jt. 2 7/8" EUE 8R J-55 IPC tbg 7 jts. 2 7/8" EUE 8R J-55 tbg

TAC @ 3615'

117 jts. 2 7/8" EUE 8R J-55 tbg

Production Casing 5-1/2", 15.5# K-55 7-7/8" hole to 4051' Set @ 4005' w/1000 sx cmt TOC: 1800' by CBL

3782-881 3800-061 3812-16' 3820-28' 3834-36' 3840-46' 3854-58' 3863-67' 3879-91' 3908-12' 3917-25' 3930-34' 3942-46' PBTD-3990 TD 4051'

<u>Perfs</u>

3673-77'

3690-92'

3702-05'

3712-16'

3720-23'

3728-34'

3742-46'

3764-72'

Status

Grayburg - Open

Grayburg - Open Grayburg - Open

Grayburg - Open

Grayburg - Open Grayburg - Open

Grayburg - Open

Grayburg - Open Grayburg - Open

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C. L. Hardy # 6 Penrose Skelly Field T21S, R37E, Section 20 WBS # UWDOL-R5188

Job: Add Perfs In Grayburg Formation, Acidize, And Scale Inhibitor Squeeze

Procedure:

- 1. Install flowline. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB 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.
- 2. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test csg and BOP's to 3000 psi. POH with 2 7/8" tbg string. LD Cavins Desander equipment.
- 3. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to 3990'. Establish reverse circulation using 8.6 PPG cut brine water. Reverse circulate well clean from 3990' using 8.6 PPG cut brine water. POH with work string and bit. LD bit. Note: If well will not circulate, use air unit and clean out using foam.
- 4. MI & RU Baker Atlas electric line unit. Install lubricator and test to 2000 psi. GIH with 3 1/8" slick casing guns and perforate from 3908-12', 3917-25', 3930-34', and 3942-46' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit. Note: Use casing collars from Baker Atlas GR/Compensated Neutron/CCL Log conducted 9/1/2004 for depth correction.
- 5. PU and GIH w/ 5 ½" PPI pkr (with 14' element spacing) and SCV on 2 7/8" work string to approximately 3650'. Test tbg to 5500 psi while GIH.
- 6. MI & RU DS Services. Acidize perfs 3673-3946' with 5,200 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **3500 psi**. Spot acid to bottom of tbg at beginning of each stage. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
3942-46'	200 gals	1 BPM	3937-51'
3930-34'	200 gals	1 BPM	3926-40'
3917-25'	400 gals	1 BPM	3914-28'
3908-12'	200 gals	1 BPM	3900-14'
3879-91'	400 gals	1 BPM	3878-92'

3854-67'	400 gals	1 BPM	3853.5-67.5'
3834-46'	400 gals	1 BPM	3833-47'
3820-28'	400 gals	1 BPM	3818-32'
3812-16'	200 gals	1 BPM	3806-20'
3800-06'	300 gals	1 BPM	3796-3810'
3782-88'	300 gals	1 BPM	3780-94'
3764-72'	400 gals	1 BPM	3760-74'
3742-46'	200 gals	1 BPM	3740-54'
3728-34'	300 gals	1 BPM	3726-40'
3712-23'	300 gals	1 BPM	3710-24'
3702-05'	200 gals	1 BPM	3696-3710'
3690-92'	200 gals	1 BPM	3684-98'
3673-77'	200 gals	1 BPM	3670-84'

Displace acid with 8.6 PPG cut brine water — do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. Note: Pickle tubing in 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 1000 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals.

* Acid system is to contain:	1 GPT A264	Corrosion Inhibitor
•	8 GPT L63	Iron Control Agent
	2 PPT A179	Iron Control Aid
	20 GPT U66	Mutual Solvent
	2 GPT W53	Non-Emulsifier

- 7. Release PPI pkr and PUH to approximately 3650'. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Note: Selectively swab perfs as directed by Engineering if excessive water is produced.
- 8. Open well. MI & RU pump truck. Pump down tbg with 50 bbls 8.6 PPG cut brine water containing 110 gals Baker RE-4777 Scale Inhibitor followed by 200 bbls 8.6 PPG cut brine water at **5 BPM** and **2500 psi maximum pressure**. RD and release pump truck. Release PPI pkr. POH LD 2 7/8" work string and PPI packer.
- 9. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 1 jt. 2 7/8" EUE 8R J-55 IPC tbg, 7 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 117 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3615', with EOT at 3900' and SN at 3865'.

- 10. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release workover unit.
- 11. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH 6/15/2005