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FORM APPROVED OM B No 1004-0137 Expires. March 31, 2007

Form 3160-5 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

NMOCD ARTESIA

	BOKENO OF EARLY MINE	•		S Tease Sena	=
SUNDRY	NOTICES AND REI	PORTS ON WE	LLS	NMNM	
Do not use tl abandoned w	his form for proposals ( ell. Use Form 3160-3 (	to drill or to re- APD) for such pr	enter an oposals.	6 If Indian	, Allottee or Tribe Name
SUBMIT IN TR	IPLICATE- Other inst	7. If Unit or CA/Agreement, Name and/or No. NMNM071030X			
l Type of Well	8 Well Name and No.				
				4	Unit #502
Name of Operator SandRidge F	xploration and Production, L			9. API We	
a Address 123 Robert S. Kerr Ave, Oklal	homa City, OK 73102	3b. Phone No (included 405-429-5682	le area code)		d Pool, or Exploratory Area
. Location of Well (Footage, Sec,	T., R., M., or Survey Description)				ırg, Jackson-SR-Q-G-SA
1310' FNL & 560' FWL, UL:	D, Sec. 21, 17S, 31E			11. County	or Parish, State
				Eddy, I	NM
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATU	RE OF NOTICE, R	EPORT, OR	OTHER DATA
TYPE OF SUBMISSION		TY	PE OF ACTION		
	Acidize	Deepen	Production (St	art/Resume)	Water Shut-Off
Notice of Intent	Alter Casing	Fracture Treat	Reclamation		Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete		Other TD Change
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporanly Al		
	Convert to Injection	Plug Back	Water Disposal		
<ol> <li>Total Depth of Well: 0</li> <li>Drilling Program - Est</li> <li>Casing Program - Plea</li> <li>Company contacts - Pl</li> <li>Rig Information - Cha</li> </ol>	nged to Lariat 17 Rig o - due to Operator Change eff	900' ise see attached ing Depth: 4600' Grad	,		
4. I hereby certify that the fore Name (Printed/Typfid)	SEE ATTACH CONDITIONS	OF APPRO	<b>DVAL</b> Regulatory Manager		
Signature	MARK	Date		01/28/2010	APPROVED
· P 1	THIS SPACE FOR	FEDERAL OR S	STATE OFFICE	USE	
Approved by			Title	,	Date FEB 1 0 2010
Conditions of approval, if any, are	attached Approval of this notice			1 1	/s/ Chris Walls
ertify that the applicant holds legather which would entitle the applicant t	al or equitable title to those rights o conduct operations thereon.	in the subject lease	Office	B	UREAU OF LAND MANAGEMEN
Title 18 USC. Section 1001 and Tit States any false, fictitious or fraudu	le 43 USC. Section 1212, make its	a crime for any person k as to any matter within i	nowingly and willfully ts jurisdiction	to make to an	y depathication agently of the Profes



Sandridge Tertiary, LLC Skelly Unit, Eddy Co., New Mexico Rene Ulmschneider - Geologist

GEOLOGICAL PROGNOSIS
January 26, 2010

WELL NAME:

Skelly Unit #502

API#:

3001537006

SURFACE LOCATION:

SW NW NW (1310 FNL & 560 FWL) Section 21, T-17S, R-31E

Eddy. Co., New Mexico

ELEVATIONS: 3728'GL (John West Surveying Co.), 3741'KB (13' KB on Lariat

Rig #17)

ANTICIPATED CASING: 8 5/8" @ 290; 5 1/2" @ TD

FORMATION TOPS:	SUBSEA	. MD (DRILL DEPTH)
Rustler Anhydrite/Base of Red Beds	+3460'	281'
- Salado	+3225	516 <b>′</b>
Tansill/Base of Salt	+2358'	1383 <b>′</b>
Yates	+2226'	1515'
Seven Rivers*	+1902'	1839 <b>'</b>
Queen*	+1302'	2439'
Grayburg*	÷953 <b>′</b>	2788 <b>′</b>
San Andres*	+592'	3149'
Lovington SS	+458'	3283 <i>′</i>
Lower Jackson (SA Pay)*	+219'	3522 <b>′</b>
Total Depth (TD in San Andres):	-159'	3900 <b>′</b>
(*potential pay zones)		

COMMENTS: This is a 10 acre infill well. Production is found here in multiple thin pay zones in the Seven Rivers, Queen, Grayburg-Upper San Andres and the "Lower Jackson" San Andres pay zone. The TD of 3900' is proposed to test all of "Lower Jackson" San Andres pay zone.

OPEN-HOLE LOGS: Dual Laterolog/MSFL, Neutron-Density/PE/Spectralog,

Sonic; TD to casing

GR-Neutron; Through casing to 200'

#### COMPANY CONTACTS:

Rene Ulmschneider, Geologist

Office: 432-687-4242, ext. 211

Fax: 432-687-4244 432-685-0021 Home: rulmschneider@sdrge.com

George Davis, Geology Mgr. Office: 405-429-5712

Fax:

405-429-5964

Home:

405-525-6745

Cell:

405-471-2144

gdavis@sdrge.com

Matt Nelson, Drilling Engineer

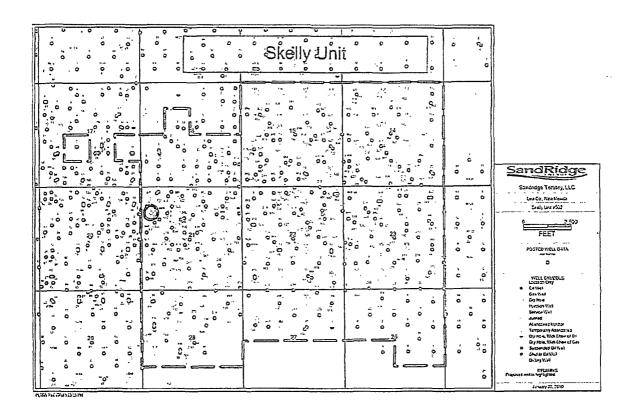
Office:

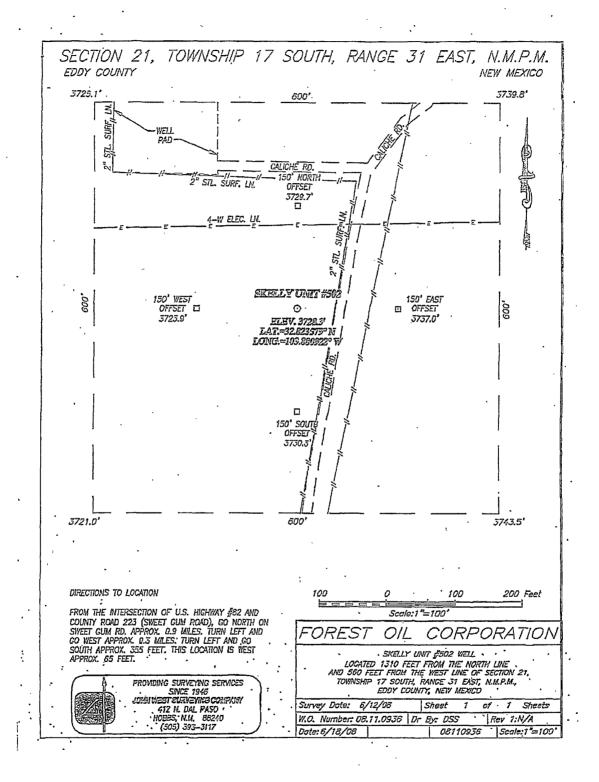
405-429-6030

Cell:

405-651-2833

mnelson@sdrge.com





## SANDRIDGE ENERGY

### PRODUCTION CASING DESIGN

WELL NAME & NUMBER: SKELLY UNIT 503

MATT NELSON

1/26/2010

LOCATION: EDDY COUNTY, NM MAXIMUM MUD WEIGHT:

HOLE SIZE: 7.875 in.
BOUANCY FACTOR:

DATE:

DRIFT

7.972 in.

DEPTH: 3900 ft MD CALCULATED TOP OF CEMENT:

10.0 PPG 3900 ft 0 ft

TVD

CTOR:	0.847	LAST CASING SIZE:

8.625 In.

SECTION	OF STRING	Ε	DESCRIPTION OF CASIN	G	JOINT TYPE	1	WEIGHT (M LBS)			COLLAPSE		TEN	NOIS	BUI	RST
	I							FOR							
DEPTH OF	LENGTH OF				THREADED		FOR COLLAPSE	TENSION	RATED	CORRECT FOR	j	MINIMUM		BURST	]
воттом	SECTION	ao	WEIGHT PER FOOT	GRADE	CONNECTION	OF SECTION	CORRECTION	DESIGN	COLLAPSE PSI	TENSION	COLL SF	YIELD	TENS SF	PRESSURE	BURST SF
3900'	3900'	5,5"	17#	J-55	LTC	66	66	66	4910		2.05	247	3.72	5320	1.11

TOTAL

3900 FT, PLUS 1% THREAD LOSS AND 120 FT EXTRA

TOTAL FOOTAGE TO BE INSPECTED

4059FT

DESC	RIPTION OF C	<b>ASING</b>	JOINT TYPE		DIMENSI	MAKE UP TORQUE (FT/LBS)				
	WEIGHT PER		THREADED			WALL				
. 00	FOOT	GRADE	CONNECTION	_ ID	DRIFT	THICKNESS	CPLG OD	OPTIMUM	MIM	XAM
5.5"	1711	1-55	LTC	4.892 in	4,767 in	0.304	6.05	2470	1850	3090

## Casing & Cement

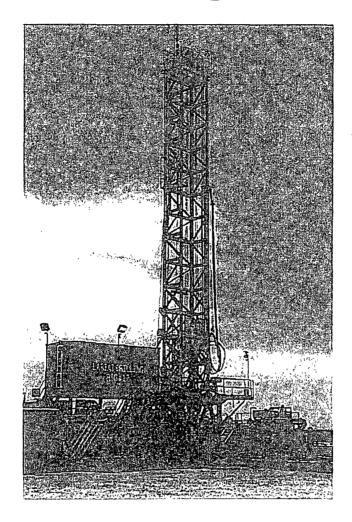
Hole Size	OD	Weight(lb/ft)	Grade	Age	Conn	Set Depth
17.5"	14"	36.71#	B-250	New	NA NA	40'
12.25"	8.625"	8 jts of 24# 3 jts of 32#	J-55	New	STC	450'
7.875"	5.5"	17#	J-55	New	LTC	3900'

- Surface casing string will be cemented to surface with 150% excess. Cement with 150 sks Lead 65/35/6 class C cement w/ 2% CaCl2 ÷ 1/8#/sk Celloflake ÷ 0.004 gps CF-41L (defoamer) mixed @ 12.8 ppg, 1.83 yield, 9.76 mix water and ~3hr TT. Followed by 150 sks Tail Class C cement w/ 2%CaCl2 ÷ 0.0004 gps CF-41L mixed @ 14.8 ppg, 1.34 yield, and 6.32 gal/sk mix water.
- Production casing string will be cemented to surface with 100% excess for Lead slurry of 350sks of 65/35/6 class C w/ 5%salt ÷ 5# Kolseal (lcm) ÷ .004 gps CF-41L, mixed @ 12.4 ppg, 2.1 yield, and 11.14 mix water and 4:30hr TT. Followed by 340 sks Tail 50/50/2 class C cement (50% excess) w/ 2/10% C-12, 10%salt ÷ 2% gypsum, 3#sk Kolseal ÷ .004 gps CF-41L, mixed at 14.4 ppg, 1.31 yield, and 2:30 hr TT. Actual volumes and properties could be adjusted according to hole conditions, and openhole caliper log.
- Production Tubing will be a string of 2-7/8" 6.5# J-55 tubing

SandRidge Energy......405-429-5500 Contacts:

Name	Title	Office Phone	Mobile Phone	email
Matt Nelson	Drilling Engineer	405-429-6030	405-651-2833	mnelson@sdrge.com
Nick Newland	Drilling Manager	405-429-5655	405-761-3414	nnewland@sdrge.com
Jerry Shrum	Sr. Drilling Supt. Consultant	432-894-3269 m	936-494-9410	jshrum1@sdrge.com
Floyd Shrum	Drilling Supt. Consultant	432-661-3513 m	432-631-3850	fshrum@sdrge.com
John Shrum	Drilling Supt. Consultant	432-813-4504 m	432-209-0736	jshrum@sdrge.com

## Lariat Rig 17



#### APPROXIMATE AGE:

Built 2005

### **POWERED DRAW WORKS:**

Rt 400 Single Drum Drawworks Lebus Grooved for 1 1/8" Line 42" x 10" Brakes with 424-400,000# Tension Torque Brake.

Powered by 630 HP Series 60 Detroit Engine with an Allison 6061 Transmission to 500 HP Right Angle Gear Box.

### MAST & SUBSTRUCTURE:

International Derrick Service 67' 500,000 GNC Mast Mounted on a 3 Axle Carrier with Boatskid 12' Substructure with Pipe Handling Boom Arm.

## **POWERED PUMPS:**

- (1) RSF-1000 Powered by Detroit Series 2000 Diesel Engine. (1) EMSCO DB-550 Powered by Caterpillar 3406 Diesel Engine.

#### TOP HEAD DRIVE AND POWER UNIT:

Top Drive system XK250-24K Powered by Detroit Series 60 / 350 HP @ 1200 RPM with Sunstrawn Hydraulic Pump. Maximum Circulating Pressure 5000 PSI with Torque Capacity of 24,000 Ft. lbs. Max. RPM 150.

#### CROWN AND TRAVELING CARRIER FOR TOP HEAD DRIVE:

Crown is Designed for 8 Line String Up. Consisting of (8) 20" x 1 1/8" Sheaves. Banjo Sheaves are 1 1/8" X 250 Ton.

#### WELL CONTROL EQUIPMENT:

Koomey 8 Bottle 5 Station Accumulator. 5000 # Choke Manifold. 11" x 3000 # Double Shaffer B.O.P.

#### **GENERATOR HOUSE:**

10' x 48' Skid Mounted House.

(2) 380 KW Marathon Generators Powered by (2) Detroit Series 60 550 HP Diesel Engines. Sullivan Paletek Rotary Screw Compressor.

#### MUD SYSTEM:

(2) 10' W  $\times$  5' H  $\times$  40' L with 10' Porch on Each End 400 BBL Each with (4) 5"  $\times$  6" Centrifugal Pumps with 50 HP, Electric motors, Linear Shale Shaker. (2) Cone Desander (12) Cone Desilter and Mud Hopper.

#### TOOLPUSHER'S HOUSE:

8' W x 40' L Idle Time Trailer.

#### TOP DOGHOUSE:

8' W x 20' L with 4' Porch.

#### **BOTTOM DOG HOUSE:**

25' L x 8' W with 5 Station Accumulator Mounted on Front.

#### WATER TANK

8' W  $\times$  8' H  $\times$  40' L with Lubster Mounted on One End with (2) 2'' X 3'' Centrifugal Pumps with 20 HP Electric Motors. Water Tank 500 BBL Cap.

#### HANDLING TOOLS AND AUXILLARY EQUIPMENT:

OWI 1000 Hydraulic Wireline Machine.

U.S. Oil Tools.

Air Slips.

- (2) Braden Hydraulic 3/8" Line Winches.
- (1) 450 Gallon Day Tank on Unit.
- (1) 450 Gallon Hydraulic Tank.
- (3) Suitcases (1)  $32' \times 3' \times 1" (1) 40' \times 3' \times 1" (1) 34' \times 3' \times 2"$ .
- (1) Diesel Tank Skid Mounted 38' L x 7' (Tank is 6' x 6' x 14').
- (1) Junk Box 5' x 8" x 20'.
- (1) Auto-Drill Automatic Driller.

Type "D" Weight indicator with E-80 Sensator.

Deadline Anchor Hercules Type HA 118T.

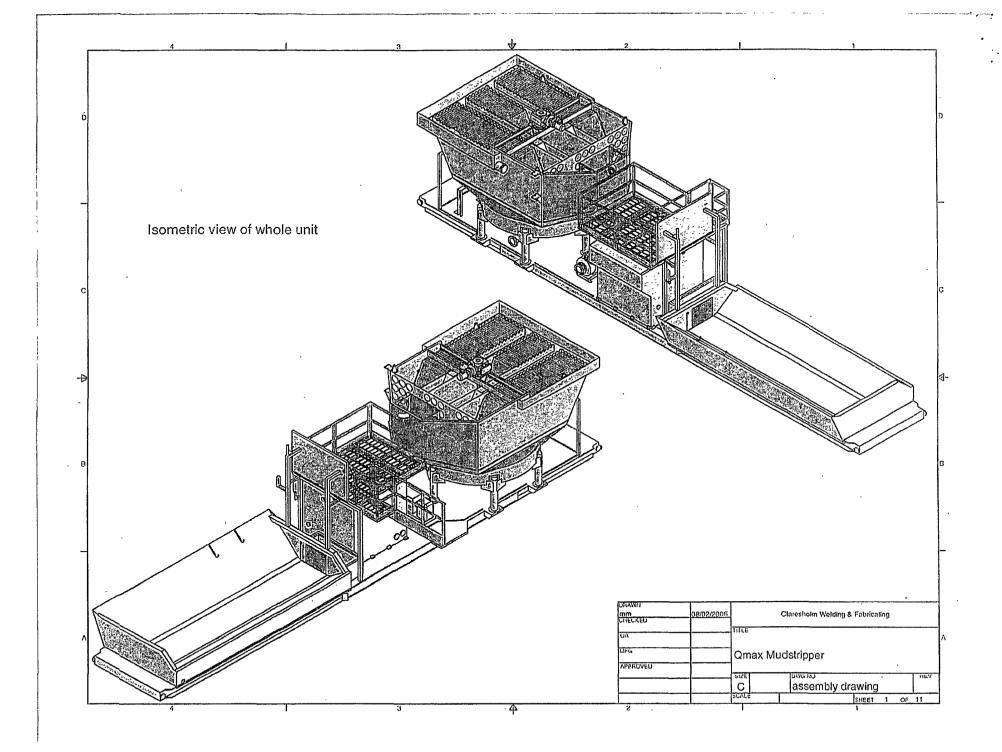
Crown Protection System.

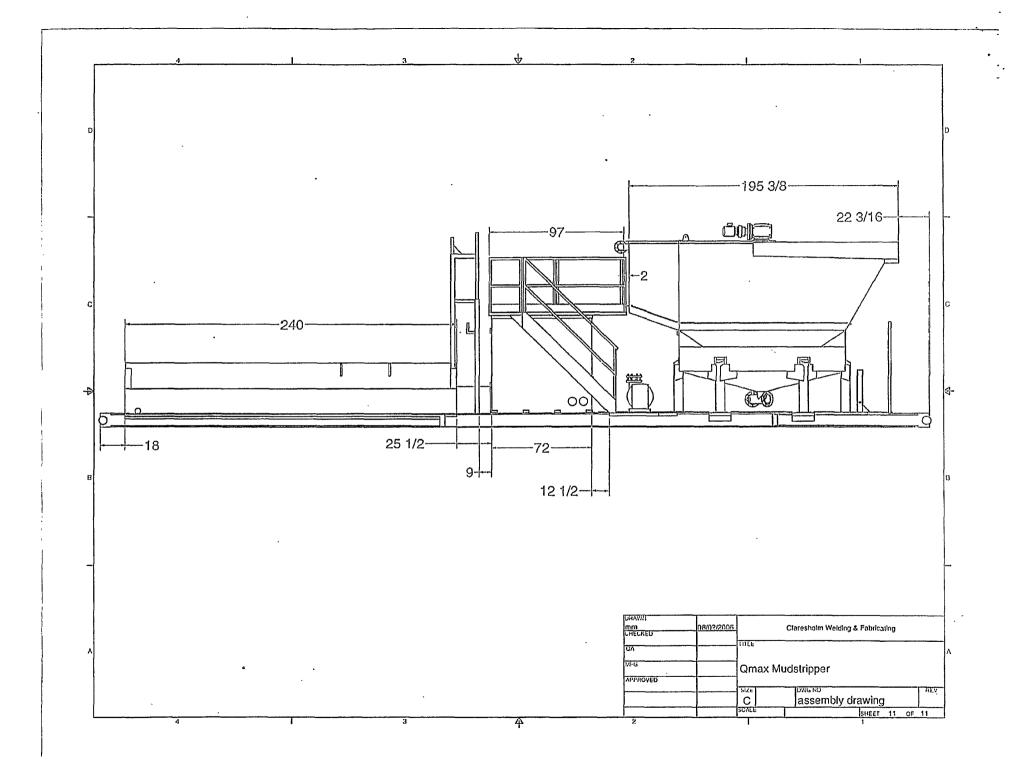
(1) Pre-Mix Pit 7' W  $\times$  7' H  $\times$  28' L.with 5"  $\times$  6" Mixing Pump 100 HP

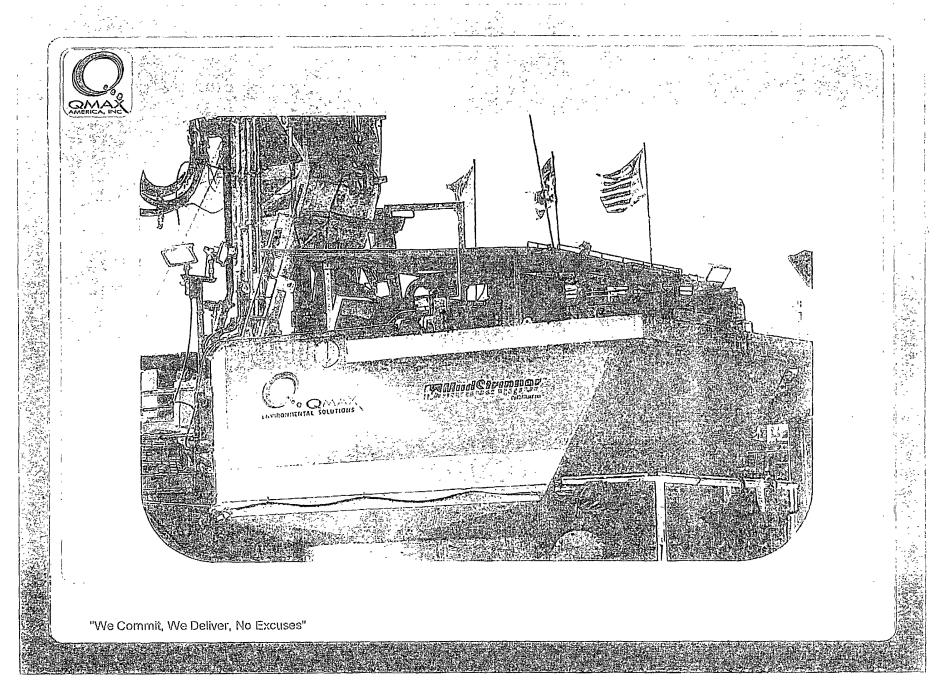
Electric Motor.

(1) 500 BBL Storage Tank.

December 2005









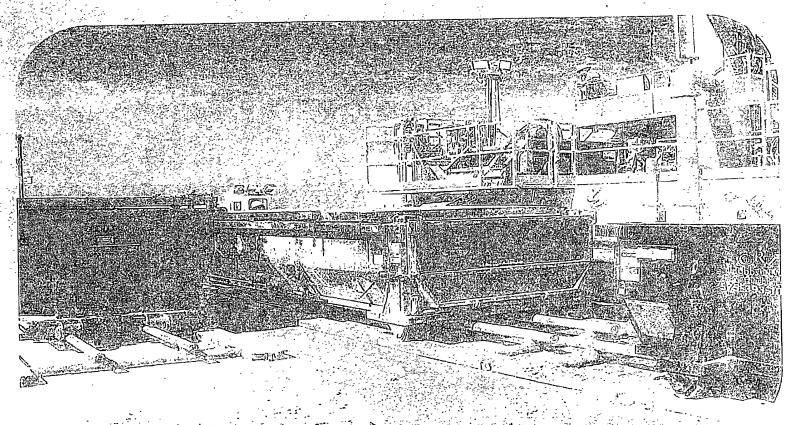
## Back end with discharge line



" "We Commit, We Deliver, No Excuses"



## Roll off Bins New Mexico



"We Commit, We Deliver, No Excuses"

## **CONDITIONS OF APPROVAL**

**OPERATOR'S NAME:** | Sandridge Exploration and Production

LEASE NO.: NMNM-98122 WELL NAME & NO.: Skelly Unit 502

SURFACE HOLE FOOTAGE: 1310' FNL & 560' FWL

LOCATION: | Section 21, T. 17 S., R 31 E., NMPM

**COUNTY:** Eddy County, New Mexico

#### A. CASING

1. The 8-5/8 inch surface casing shall be set at approximately 450 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - ⊠ Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

CRW 020910