8095

OCD-ARTESIA

HTS-08-30

Form 3160-3
(August 2007)

DEC 26 2007
OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

116

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM 92757

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No.

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. 36483
Goodnight Federal, Well #2

2 Name of Operator
Morexco, Inc. 15262

9. API Well No.
30 015 - 36015

3a. Address
c/o Box 953, Midland, TX 79702

3b. Phone No. *(include area code)*
432 684-6381 684-4344

10. Field and Pool, or Exploratory
Willow Lake; Bone Springs 64450

4 Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 2310 FSL and 990 FEL (I)
At proposed prod. zone same

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 30, T24S, R28E

14. Distance in miles and direction from nearest town or post office*
7 miles South of Loving, NM

12. County or Parish
Eddy

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 990'	16. No of acres in lease 640 acres	17. Spacing Unit dedicated to this well 40 acres
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 990'	19. Proposed Depth ~~6900'~~ 6230' - per oper. 12/19/07 wm	20. BLM/BIA Bond No. on file NM Bond # 1583
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3060'	22. Approximate date work will start* 12/15/2007	23. Estimated duration 30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1 Well plat certified by a registered surveyor.
2 A Drilling Plan.
3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25 Signature	Name *(Printed/Typed)*	Date
	Ann E. Ritchie	10/25/2007

Title
Regulatory Agent 432 684-6381 ann.ritchie@wtor.net

Approved by *(Signature)* /s/ James Stovall	Name *(Printed/Typed)* /s/ James Stovall	Date DEC 20 2007
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached. APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

District I
1625 N. French Dr., Hobbs NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

DEC 26 2007
OCD-ARTESIA

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies
☑ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name	
30-015-	64450	Willow Lake, Bone Springs	
[4]Property Code	[5]Property Name		[6]Well Number
	Goodnight Federal		2
[7]OGRID No.	[8]Operator Name		[9]Elevation
15262	Morexco, Inc.		3060'

[10]Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	24 S	28 E		2310	South	990	East	Eddy

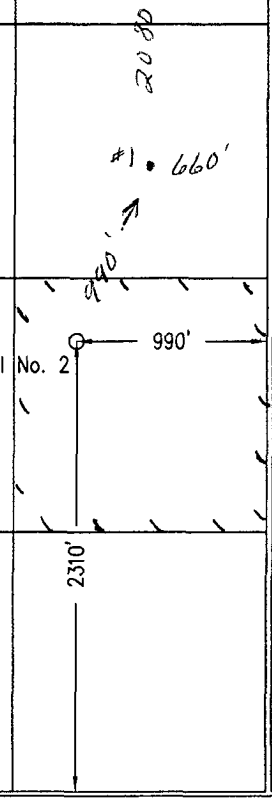
[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNITL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Ann E. Ritchie
Printed Name

ann.ritchie@wtor.net
Regulatory Agent
Title and E-mail Address

10-31-07
Date

[18]SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

10-25-2007
Date of Survey

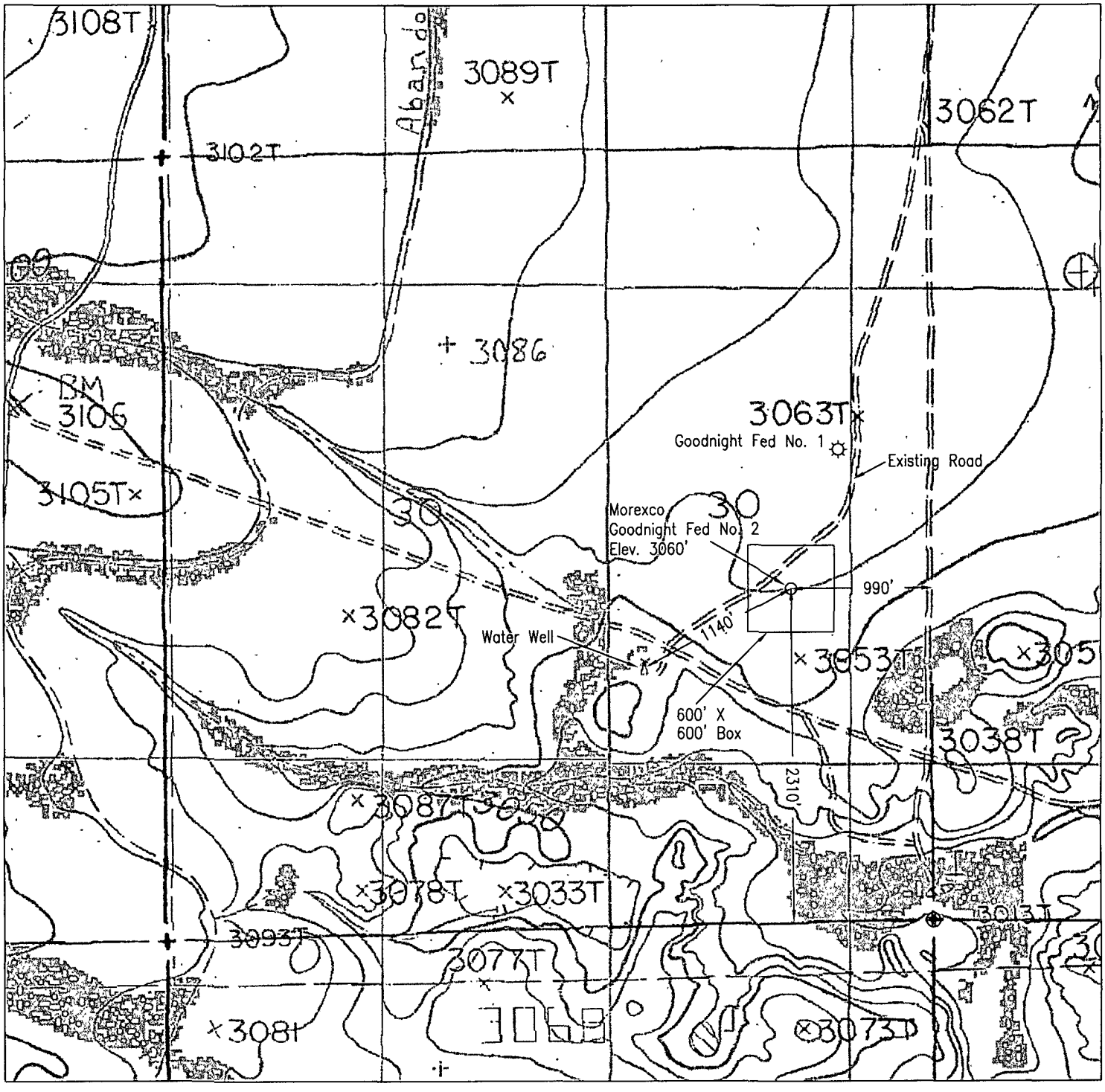
Signature and Seal of Professional Surveyor

MICHAEL L. STANFORD
NEW MEXICO
10324
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number

7 Miles South of Loving, New Mexico.

File No. A-3630A.dwg



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Topographic Site Map

1000 0 1000 2000 3000 Feet

Morexco, Inc.
Goodnight Federal No. 2 – 2310' FSL & 990' FEL
Section 30, T24S, R28E, NMPM,
Eddy County, New Mexico

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Mike Stanford	10-25-2007	1" = 1000'	A-3631A

Drilling Plan

(Supplement to BLM 3160-3)

Morexco, Inc., c/o P.O. Box 953, Midland, TX 79702-0953

Goodnight Federal, Well #2

2310' FSL & 990' FEL (I); Section 30, T24S, R28E, Eddy County, New Mexico

Willow Lake; Bone Spring: Pool Code 64450

NM 92757

1. The geologic surface formation is quaternary alluvium.

2. Name and estimated tops of geologic markers; water, oil or gas:

Lamar	2505'	Oil/Gas
Bell Canyon	2545'	Oil/Gas
Cherry Canyon	3320'	Oil/Gas
Manzanita Marker	3445'	Oil/Gas
Brushy Canyon	4455'	Oil/Gas
Bone Spring Lime	6090'	Oil/Gas

3. No other formations, other than the targeted Bone Springs is anticipated to give up oil, gas or fresh water in measureable quantities. Surface fresh water sands will be protected by setting 13 3/8" casing @ 500' and circulating cement back to surface.

4. **Specifically the casing string referenced in #3 above will consist of the following:**

see COA

Surface: 13 3/8" OD, ~~54.5#~~ 48 #/ft, ~~J55~~ H-40, STC, new pipe @ 500'+/- in 17 1/2" hole.

Intermediate: 8 5/8" OD, 32 & 24# J55 casing, new pipe @ 2510' +/- , 12 1//4" hole.

Production: 5.50" OD, 17 & 15.5#/ft, J55, LTC, new pipe @ ~~6900'~~ 6230 +/- in 7.875" hole

See attachment on casing

- new spec. 12/19/07

Cementing programs for the above casing strings are:

Surface: 800 sx Interfill C, .25#/sk flocele mixed at 14.8 ppg, and having a yield of 1.34 cu ft/sk, 250 sx PP, 2% CaCl

The above volume represents 100% excess over calculated hole volume, and will be adjusted to actual setting depth of casing. The slurries will be preceded by a fresh water spacer, and displaced with brine water.

Intermediate: 1200 sx Cl C/ Premium Plus cement. cement sufficient to tie into surface casing.

Production: Cement w/1800 sx cement slurry determined by borehole volume log calculations to bring TOC to approximately 2000'.

The above are Schlumberger products with 50% excess volume - actual volumes will be adjusted to the open hole caliper of this wellbore. The cement slurries will be preceded by 12 bbls cement wash for mud removal and displaced with fresh water. Equivalent products from another vendor may be substituted for Schlumberger depending on price/availability.

5. The well control equipment to be employed during the drilling of this well is as illustrated on attached BOP diagram. This equipment includes a pipe and blind rams, an annular preventer and a choke manifold of comparable pressure rating. Equipment will be rated for a minimum of 3000 psi, and will be tested to 80% of that pressure rating prior to drilling out of the 13 3/8"surface casing.

6. It is anticipated that this well will be drilled to TD utilizing the fluids shown below:

see COA

0-600': Fresh Water; 8.5 ppg; 40 vis; Waterloss-N.C.

600-~~6900~~ 6230': Brine/Cut Brine/Polymer, 9.4 ppg; 30 vis; Waterloss- N.C.-15

7. Auxiliary equipment will include an upper kelly cock valve, safety valve to fit drill pipe and pressure gauges.

8. No drill stem testing or coringis planned for this wellbore.

   Electric logging will consist of GR-Dual Laterlog-MSFL and GR-Compenstated Density-Neutron from TD to surface casing and/or surface.

9. The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom hole pressure (BHP) at total depth of 3000 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. It is estimated that this well will be drilled and cased in 21-30 days. Drilling will commence as soon after approval is received and services can be contracted. If the well is production, an additional estimated 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

DRILLING PROGRAM

Morexco, Inc.
Goodnight Federal, Well #2
Eddy County, New Mexico

1. Wear ring to be properly installed in head.

2. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.

3. All fittings to be flanged.

4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi. WP minimum.

5. All choke and fill lines to be securely anchored especially ends of choke lines.

6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilling through.

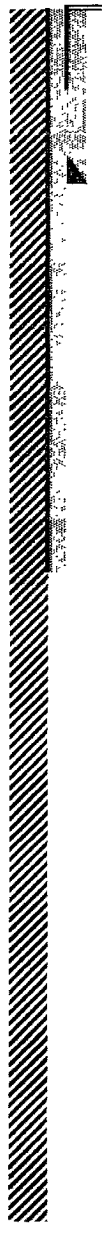
7. Kelly cock on kelly.

8. Extension wrenches and hand wheels to be properly installed.

9. Blow out preventer control to be located as close to driller's position as feasible.

10. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

FORM	TOP



Goodnight Federal, Well #2

PROPOSED WELLBORE DIAGRAM

Morexco, Inc.

Sec-T-R	30-24S, 28E	**API #:**	30-015-
POOL:	Willow Lake; Bone Springs		
CO, ST:	EDDY, NEW MEXICO	**LAND TYPE:**	Federal
STATUS:	APD	**ACREAGE**	40.00
Application to drill: 10/25/2007			
DIAGRAM REVISED:	10/7		

LOG ELEVATION:	N/R
GROUND ELEVATION:	' 3060'

	CASING			TUBING
Hole	17 1/2"	12 1/4"	7 7/8"	
Pipe	13 3/8"	8 5/8"	5 1/2"	
Weight	54.5#	32/24#	17/15.5#	
TOC	surface	300'	2000'	
Thread				

Operator: MOREXCO	Well Name: Goodnight Fed. #2
Project ID: 1	Location:

Design Parameters:

Mud weight	(9.20 ppg)	0.478	psi/ft
Shut in surface pressure	:	239	psi
Internal gradient (burst)	:	0.000	psi/ft
Annular gradient (burst)	:	0.000	psi/ft

Tensile load is determined using air weight

Service rating is "Sweet"

Design Factors:

Collapse	: 1.125	
Burst	: 1.00	
8 Round	: 1.80	(J)
Buttress	: 1.60	(J)
Other	: 1.50	(J)
Body Yield	: 1.50	(B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	500	13.375	48.00	H-40	ST&C	500	12.559	

	Collapse Load (psi)	Collapse Strgth (psi)	Collapse S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	Burst S.F.	Tension Load (kips)	Tension Strgth (kips)	Tension S.F.
1	239	740	3.097	239	1730	7.24	24.00	322	13.42 J

Prepared by : Jim Scroggin, Artesia, New Mexico
Date : 10-22-2007
Remarks :

Minimum segment length for the 500 foot well is 100 feet.

The mud gradient and bottom hole pressures (for burst) are 0.478 psi/ft and 239 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.

Costs for this design are based on a 1987 pricing model. (Version 1.06+)

Operator Name: Morexco Inc
Well Name: Well No. 1
Job Description: 13 3/8" Surface Pipe
Date: November 19, 2007

Proposal No: 180270103A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	742	/ 1.8	= 405 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 2% bwow Calcium Chloride + 0.25 lbs/sack Cello Flake + 93.5% Fresh Water
Tail Slurry	337	/ 1.3	= 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 56.3% Fresh Water
Displacement			87.9 bbls Water @ 8.4 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.80	14.80
Slurry Yield (cf/sack)	1.83	1.35
Amount of Mix Water (gps)	9.75	6.35

Operator: MOREXCO	Well Name: Goodnight Fed. #2
Project ID: 2	Location:

Design Parameters:

Mud weight (10.00 ppg)	: 0.519	psi/ft
Shut in surface pressure	: 1938	psi
Internal gradient (burst)	: 0.000	psi/ft
Annular gradient (burst)	: 0.000	psi/ft

Tensile load is determined using air weight

Service rating is "Sweet"

Design Factors:

Collapse	: 1.125	
Burst	: 1.00	
8 Round	: 1.80	(J)
Buttress	: 1.60	(J)
Other	: 1.50	(J)
Body Yield	: 1.50	(B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	100	8.625	32.00	J-55	ST&C	100	7.875	
2	2,200	8.625	24.00	J-55	ST&C	2,300	7.972	
3	150	8.625	32.00	J-55	ST&C	~~2,450~~ 2510	7.875	

	Collapse Load (psi)	Collapse Strgth (psi)	Collapse S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	Burst S.F.	Tension Load (kips)	Tension Strgth (kips)	Tension S.F.
1	52	2439	9.999	1838	3930	2.14	60.80	372	6.12 J
2	1195	1365	1.143	1838	2950	1.61	57.60	244	4.24 J
3	1273	2530	1.988	1838	3930	2.14	4.80	372	77.50 J

Prepared by : Jim Scroggin, Artesia, New Mexico
Date : 10-22-2007
Remarks :

Minimum segment length for the 2,450 foot well is 1,000 feet.

Surface/Intermediate string:

Next string will set at 5,230 ft. with 9.70 ppg mud (pore pressure of 3,139 psi.) The frac gradient of 0.750 psi/ft at 2,450 feet results in an injection pressure of 1,838 psi. Effective BHP (for burst) is 1,838 psi.

The minimum specified drift diameter is 7.875 in.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06-)

Operator Name: Morexco Inc
Well Name: Well No. 1
Job Description: 8 5/8" Intermediate Pipe
Date: November 19, 2007

Proposal No: 180270103A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Scavenger Slurry	374	/ 1.8	= 200 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 0.25 lbs/sack Cello Flake + 10 lbs/sack LCM-1 + 86.4% Fresh Water
Lead Slurry	641	/ 1.9	= 330 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 100.7% Fresh Water
Tail Slurry	370	/ 1.4	= 250 sacks (40:60) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.5% bwoc Sodium Metasilicate + 4% bwoc MPA-1 + 0.25 lbs/sack Cello Flake + 69.3% Fresh Water
Displacement			182.5 bbls Water @ 8.4 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2	SLURRY NO. 3
Slurry Weight (ppg)	12.70	12.70	13.80
Slurry Yield (cf/sack)	1.87	1.94	1.48
Amount of Mix Water (gps)	9.02	10.50	7.14

Operator: MOREXCO	Well Name: Goodnight Fed. #2
Project ID: 1	Location:

Design Parameters:

Mud weight (9.70 ppg)	: 0.504	psi/ft
Shut in surface pressure	: 3139	psi
Internal gradient (burst)	: 0.000	psi/ft
Annular gradient (burst)	: 0.000	psi/ft

Tensile load is determined using air weight

Service rating is "Sweet"

Design Factors:

Collapse	: 1.125	
Burst	: 1.00	
8 Round	: 1.80	(J)
Buttress	: 1.60	(J)
Other	: 1.50	(J)
Body Yield	: 1.50	(B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	6,230	5.500	15.50	J-55	LT&C	6,230	4.825	

	Collapse Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	S.F.	Tension Load (kips)	Tension Strgth (kips)	S.F.
1	3139	4040	1.287	3139	4810	1.53	96.57	217	2.25 J

Prepared by : Jim Scroggin, Artesia, New Mexico
Date : 10-22-2007
Remarks :

Minimum segment length for the 6,230 foot well is 1,000 feet.

The mud gradient and bottom hole pressures (for burst) are 0.504 psi/ft and 3,139 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.

Costs for this design are based on a 1987 pricing model. (Version 1.06+)

Operator Name:	Morexco Inc
Well Name:	Well No. 1
Job Description:	5 1/2" Long String
Date:	November 19, 2007

Proposal No: 180270103A

FLUID SPECIFICATIONS

STAGE NO.: 1

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	1375	/ 1.5	= 865 sacks (15:61) Poz (Fly Ash):Class C Cement + 11 lbs/sack CSE-2 + 3% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.25 lbs/sack Cello Flake + 0.4% bwoc CD-32 + 5 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6% bwoc FL-52A + 0.1% bwoc Sodium Metasilicate + 81.9% Fresh Water

Displacement 268.7 bbls Mud @ 9 ppg

CEMENT PROPERTIES

	SLURRY NO. 1
Slurry Weight (ppg)	13.30
Slurry Yield (cf/sack)	1.59
Amount of Mix Water (gps)	7.46

DVT @ 4700'

STAGE NO.: 2

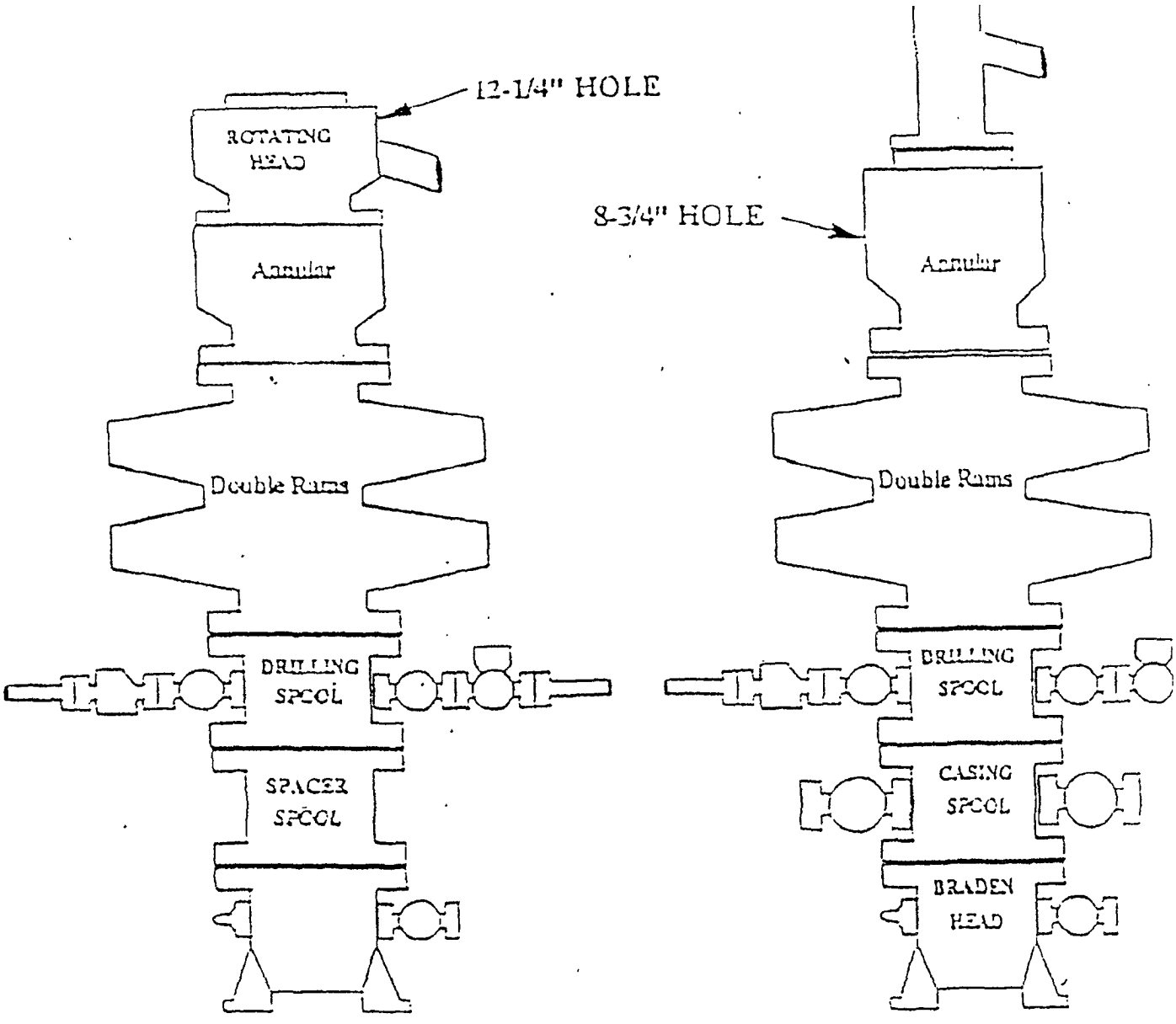
FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1629	/ 2.0	= 810 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 0.5% bwoc FL-52A + 3% bwow Sodium Chloride + 5 lbs/sack LCM-1 + 0.25 lbs/sack Cello Flake + 100.6% Fresh Water
Tail Slurry	1225	/ 1.4	= 840 sacks (40:60) Poz (Fly Ash):Class C Cement + 2% bwow Sodium Chloride + 0.75% bwoc BA-10A + 0.15% bwoc R-3 + 0.25 lbs/sack Cello Flake + 2 lbs/sack Kol Seal + 4% bwoc MPA-1 + 66.2% Fresh Water

Displacement 186.0 bbls Water @ 8.4 ppg

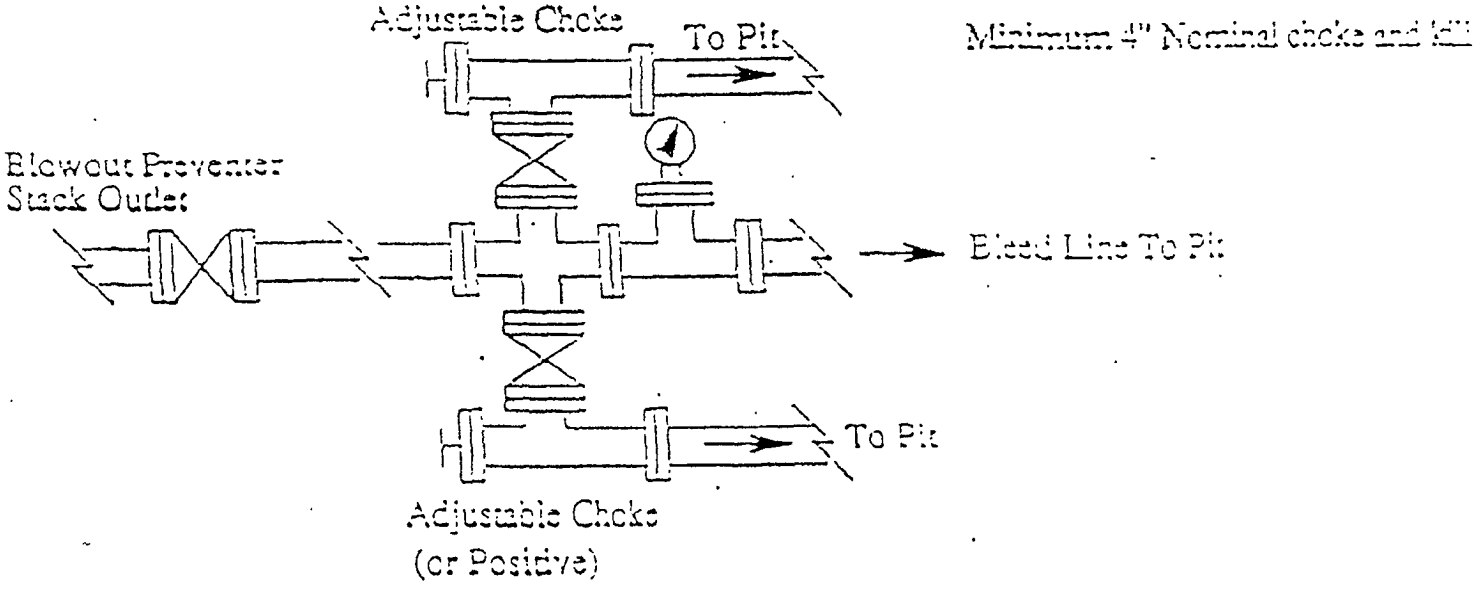
CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.50	13.80
Slurry Yield (cf/sack)	2.01	1.46
Amount of Mix Water (gps)	10.50	6.82

MOREXCO, INC., GOODNIGHT FEDERAL, WELL #2
2510 FSL, 990 FEL, Sec 30, T24S, R28E, Eddy County, NM - APD



Choke Manifold Requirement (3000 psi WP)



Surface Use Plan

(Additional data for form 3160-3)

Morexco, Inc. (15262)

Goodnight Federal, Well #2

2310' FSL & 9900' FEL (I)

Section 30, T24S, R28E, Eddy County, NM

Willow Lake; Bone Spring: Pool Code 64450/Oil

NM 92757

1. EXISTING ROADS –

   The road log to the location is as follows:

   From JCT. of U.S. 285 and County Road 396 @ Malaga, go West 2.0 miles on County Road 396, then south 1 mile on County Road, Continue SW 1 mile on trail road, then W .1 mile to location. Well is approximately 6.5 miles South of Loving and 3 miles SW from Malaga.

2. PLANNED ACCESS ROAD —Approximately 1300' of new N-S access road will be built from the existing N-S ranch caliche road to the north @ the Goodnight Federal, Well #1, located 2080' FNL & 660' FEL. All lease roads will be graded in compliance with BLM standards and made a uniform width of 20', including shoulders.

3. LOCATION OF EXISTING WELLS – The Goodnight Federal, Well #1 is located in Unit letter H, 990' from this proposed Well #2, Section 30. Attached map shows all wells with a 1 mile radius of this well.

4. LOCATION OF EXISTING OR PROPOSED FACILITIES – Aa production facility has been built in Unit Letter H for Well #1. .A 2.067" steel/poly pipe, 2000 psi gas flow line, with maximum of 600 psi operating pressures, runs south parallel to the existing and proposed access road to the gas line In Section 29 with no additional disturbance.

5. LOCATION AND TYPE OF WATER SUPPLY - All water (fresh or otherwise) needed for the drilling and completion of this well will be purchased from a commercial source and trucked to the location via the existing and proposed access road. No water source wells will be drilled, and no surface water will be utilized.

6. SOURCE OF CONSTRUCTION MATERIALS - Construction material (caliche) required for the access road and well site pad will be obtained on location, if available, or from an approved pit. No surface materials will be disturbed except those necessary fir actual grading and construction of the drill site and access road.

7. METHODS FOR HANDLING WASTE DISPOSAL –

• Drill cuttings will be disposed of in the reverse pits.

* Drilling fluids will be allowed to evaporate in the reserve pits until pits are dry.

• The drilling pits will be lined with a 12+mil biodegradable plastic liner, and buried as per regulatory requirements. The pits will be located on the drill site.

• Receptacles for solid wastes (paper, plastic, etc) will be provided and equipped to prevent scattering by wind, animals, etc. This waste will be hauled to an approved landfill site.

• Any other waste generated by the drilling, completion, testing of this well will be removed from the site within 30 days of the completion of drilling or testing operations.

• A Porta-John will be provided for the crews. This will be properly maintained during the drilling operations and removed upon completion of the well.

8. ANCILLARY FACILITIES - The drilling, completion, and/or testing of this well will not require temporary test facilities; any oil produced during completion will be stored in the existing production facility until sold.

9. WELLSITE LAYOUT - Attached, as "Drilling Pad Layout" is the plat showing the anticipated orientation of the drilling rig and the pad. The approx. 600' x 600' area in which the drill site will be located has been surveyed and flagged. Approximately 5" of topsoil will be stockpiled on the east side of the location for rehabilitation purposes. The interior reserve pit diameter is approximately 125 x 125', approximately 5000 bbls. There are not waterways or occupied structures within l/2 mile radius.

10. PLANS FOR SURFACE RESTORATION - Reclamation of the surface location will be in accordance with the requirements set forth by the BLM. As stated earlier all waste generated by this operation will be disposed of in an approved manner, and the site restored as closely as possible to its pre-operation appearance. The topsoil at the wellsite & access road is reddish brown colored fine sand. Due to the topography of the area no problems are anticipated in achieving this status and no erosion or other detrimental effects are expected as a result of this operation.

The vegetation at the wellsite is a sparse to fair grass cover of three-awn, grama, bluestem, dropseed, burrograss, muhly and misc. native grasses. Plants are sparse mesquite, yucca, sage, shinnery oak brush, broomweed, and cacti w/misc. weeds. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove and quail all typical of the semi-arid desert land. There are no ponds or streams.

11. OTHER INFORMATION - The surface ownership of the drill site and the access routes are under the control/ownership of: Bureau of Land Management, 620 E. Greene St., Carlsbad, NM 88220, 505-887-6544. Barry Hunt w/the BLM can be reached @ the BLM number or @ 505-361-4078. Surface letter agreement from Pardue Ltd. Co. – attached. Drilling contractor: Pending – Will notify upon contract.

OPERATORS REPRESENTATIVE AND CERTIFICATION

Operator Representative:

Morexco, Inc. is covered by Bond No. NM 1583; NM 2308 and is represented by:

Mr. Donald G. Becker, Company Operations and Drilling Engineer

Contact Information: (432) 934-7042; (432) 684-3880; (505) 627-1289

Morexco, Inc., P.O. Box 51208, Midland, TX 79710

Regulatory Representative: Ann E. Ritchie, West Texas Oil Reports, Box 953, Midland, TX 79702; 432, 684-6381; ann.ritchie@wtor.net

Operator Certification:

I hereby certify that I, Donald G. Becker, Jr., Company Representative, have inspected the proposed drill site, amended from 1980 FSL & 660' FEL to the current location of 2310' FSL & 990' FEL, and the access route and that I am familiar with the conditions that currently exist; that the statements made in the APD package are to the best of my knowledge true and correct; and that the work associated with operations herein will be performed by Morexco, Inc. and it's contractors and subcontractors in conformity with the terms and conditions of the Application to Drill. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application with bond coverage being provided under a BLM nationwide bond (as stated above).

This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Name and title: Donald G. Becker, Company Representative

Signature: _____

Date: 11/6/12

Surface Use Agreement

Certification

Morexco, Inc.
Goodnight Federal, Well #2
2310' FSL and 990' FEL (I)
Section 30, T24S, R28E
Eddy County, New Mexico

As per Donald G. Becker, Jr., Morexco Drilling and Operations Engineer has certified that Morexco, Inc. and Pardue Limited Company, 126 North Canyon Street, Carlsbad, NM 88220 (505) 885-9525, have reached a verbal agreement giving Morexco, Inc. permission to build a road across their fee land pasture. The road and fee land is located in Section 29, T24S, R28E and Section 30, T24S, R28E. The Bureau of Land Management controls/owns the land for the proposed access routes and drill site for the Goodnight Federal, Well #2.

Ann E. Ritchie, Regulatory Agent
Morexco, Inc.
c/o P.O. Box 953
Midland, TX 79702
432 684-6381; 432 682-1458-fax
ann.ritchie@wtor.net

V. SPECIAL REQUIREMENT(S)

Cave and Karst

Cave/Karst Surface Mitigation
The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation
The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Casing:
All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence

of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

B. CASING

1. The **13-3/8** inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite at approximately 650** feet and cemented to the surface. **Fresh water mud to be used to this depth.**

   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.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement). **Please provide WOC times to inspector for cement slurries.**

   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 action will be done prior to drilling out that string.

High cave/karst.
Possible lost circulation in the Triassic Red beds and the Castile Group.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-d above.
   Cement must circulate due to high cave/karst.
   Please provide WOC times to inspector for cement slurries.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **DVT will be set at approximately 4700'. First stage to circulate. Please provide WOC times to inspector for cement slurries.**

4. 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.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

   a. The tests shall be done by an independent service company.

   b. The results of the test shall be reported to the appropriate BLM office.

   c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

   d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

Engineer on call phone (after hours): **Carlsbad: (575) 706-2779**

WWI 121707