

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***Carlsbad Field Office**
OCD Artesia

SUBMIT IN TRIPLICATE - Other instructions on reverse side.		7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	2. Name of Operator MEWBOURNE OIL COMPANY	8. Well Name and No. ANNABELLE 13/18 W2BA FED COM 1H
3a. Address P O BOX 5270 HOBBS, NM 88241	3b. Phone No. (include area code) Ph: 575-393-5905	9. API Well No. 30-015-42765-00-X1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T24S R26E SESW 0145FSL 1980FWL 32.224858 N Lat, 104.248209 W Lon		10. Field and Pool, or Exploratory WILDCAT Black River, Wolfcamp (GAS)
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A PD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Mewbourne Oil Co. requests approval to make the following changes to the approved APD:

Change well name to Annabelle 13/18 W2BA Federal Com #1H. {316746}

Change bottomhole location to 330' FNL & 330' FEL, Sec 18, T24S, R27E.

Change target zone to Wolfcamp.

Please see attachments for details.

NM OIL CONSERVATION
ARTESIA DISTRICT**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****AUG 17 2016****RECEIVED**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #346424 verified by the BLM Well Information System For MEWBOURNE OIL COMPANY, sent to the Carlsbad Committed to AFMSS for processing by MUSTAFA HAQUE on 08/09/2016 (16MH0005SE)	
Name (Printed/Typed) ANDREW TAYLOR	Title ENGINEER
Signature (Electronic Submission)	Date 08/01/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By (BLM Approver Not Specified) Mustafa Haque	Title PETROLEUM ENGINEER	Date 08/12/2016
Conditions of approval, if any, are attached. Approval of this notice 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.		
Office Carlsbad		

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Company
LEASE NO.:	NMNM-111528
WELL NAME & NO.:	Annabelle 13/18 W2BA Fed Com – 1H
SURFACE HOLE FOOTAGE:	0145' FSL & 1980' FWL
BOTTOM HOLE FOOTAGE:	0330' FNL & 330' FEL Sec. 18, T. 24 S., R 27 E.
LOCATION:	Section 12, T. 24 S., R 26 E., NMPM
COUNTY:	Eddy County, New Mexico

A. CASING

All previous COAs still apply except the following:

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium Cave/Karst

Possibility of water flows in the Salado and Castile.

Possibility of lost circulation in the Salado and Delaware.

1. The 13-3/8 inch surface casing shall be set at approximately 400 feet and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt. Excess calculates to 20% - Additional cement may be required.

- 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 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.

Formation below the 13 3/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

2. The minimum required fill of cement behind the 9 5/8 inch intermediate is:

☒ Cement to surface. If cement does not circulate see A.1.a, c-d above.

Formation below the 9 5/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

3. The minimum required fill of cement behind the 7 inch production casing is:

Operator has proposed DV tool at depth of 2820', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

- a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

- ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. The minimum required fill of cement behind the 4 1/2 inch production liner is:

- ☒ Cement as proposed. Operator shall provide method of verification.

5. 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.

B. 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. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi (2M annular being used).**
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be **5000 (5M) psi.**

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the

slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. 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.**
- f. 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. This test shall be performed prior to the test at full stack pressure.

Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

SL: 145' FSL & 1980' FWL, Sec 12

BHL: 330' FNL & 330' FEL, Sec 18

1. Geologic Formations

TVD of target	9751'	Pilot hole depth	NA
MD at TD:	17770'	Deepest expected fresh water:	60'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	105	Water	
Top of Salt	540	Salt	
Castile	600		
Base Salt	1870		
Lamar	1990	Oil	
Cherry Canyon	2675		
Manzanita Marker	2820		
Brushy Canyon	4135		
Bone Spring	5415	Oil/Gas	
1 st Bone Spring Sand	6385		
2 nd Bone Spring Sand	6910		
3 rd Bone Spring Sand	8325		
Abo			
Wolfcamp	8665	Target Zone	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

*H2S, water flows, loss of circulation, abnormal pressures, etc.

Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

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2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17.5"	0'	400'	13.375"	48	H40	STC	3.70	8.32	16.77
12.25"	0'	1935'	9.625"	36	J55	LTC	2.01	3.50	6.50
8.75"	0'	9800'	7"	26	HCP110	LTC	1.65	2.11	2.53
6.125"	9077'	17770'	4.5"	13.5	P110	LTC	1.62	1.88	2.88
BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet				

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

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3. Cementing Program - SEE CDA

Casing	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	300	14.8	1.33	6.3	8	Class C + 1% CaCl ₂
Inter.	270	12.5	2.12	11	10	Lead: Class C (35:65:4) + 5% Sodium Chloride + 5#/sk LCM + 0.25lb/sk Cello-Flake
	200	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
Prod. Stg 1	400	12.5	2.12	11	9	Lead: 60:40:0 Class C + 15.00 lb/sk BA-90 + 4.00% MPS-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free
	400	15.6	1.18	5.2	10	Tail: Class H + 0.65% FL-52 + 0.10% R-3 + 0.005 lb/sk Static Free
ECP/DV Tool @ 2820'						
Prod. Stg 2	50	12.5	2.12	11	10	Lead: Class C (35:65:4) + 5% Sodium Chloride + 5#/sk LCM + 0.25lb/sk Cello-Flake
	100	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
Liner	355	11.2	2.97	17	16	Class C (60:40:0) + 4% MPA5 + 1.2% BA10A + 10#/sk BA90 + 5%A10 + 0.65% ASA301 + 1.5% SMS + 1.2% R21

A copy of cement test will be available on location at time of cement job providing pump times, compressive strengths, etc.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	1735'	25%
Liner	9077'	25%

Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

SL: 145' FSL & 1980' FWL, Sec 12

BHL: 330' FNL & 330' FEL, Sec 18

4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	3M 2M	Annular	X	1250#
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	13-5/8"	5M	Annular	X	2500#
			Blind Ram	X	5000#
			Pipe Ram	X	
			Double Ram		
			Other*		
6-1/8"	13-5/8"	5M	Annular	X	2500#
			Blind Ram	X	5000#
			Pipe Ram	X	
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

SEE COA	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
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Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

SL: 145' FSL & 1980' FWL, Sec 12

BHL: 330' FNL & 330' FEL, Sec 18

566
COA

Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
N	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. Provide description here See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	400	FW Gel	8.6-8.8	28-34	N/C
400	2040	Saturated Brine	10.0	28-34	N/C
2040	9077	Cut Brine	8.5-9.3	28-34	N/C
9077	17770	FW w/Polymer	9.5-13.0*	30-40	<20cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

*13.0 ppg mud used only for shale formation inhibition, not for well control. Highest MW needed for well control is expected to be 12.0 ppg.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL from KOP (9077') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned	Interval
X Gamma Ray	9077' (KOP) to TD
Density	
CBL	
Mud log	
PEX	

Mewbourne Oil Company, Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

SL: 145' FSL & 1980' FWL, Sec 12

BHL: 330' FNL & 330' FEL, Sec 18

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6085 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H ₂ S is present
X	H ₂ S Plan attached

8. Other facets of operation

Is this a walking operation? If yes, describe.

Will be pre-setting casing? If yes, describe.

Attachments

☐ Directional Plan

☐ Other, describe

Mewbourne Oil Company

Eddy County, New Mexico

Annabelle 13/18 W2BA Fed Com #1H

Sec 12, T24S, R26E

SL: 145' FSL & 1980' FWL, Sec 12

BHL: 330' FNL & 330' FEL, Sec 18

Plan: Design #1

Standard Planning Report

29 July, 2016

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Annabelle 13/18 W2BA Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3284.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3284.0usft (Original Well Elev)
Site:	Annabelle 13/18 W2BA Fed Com #1H	North Reference:	Grid
Well:	Sec 12, T24S, R26E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 330' FEL, Sec 18		
Design:	Design #1		

Project:	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Annabelle 13/18 W2BA Fed Com #1H		
Site Position:		Northing:	445,533.00 usft
From:	Map	Easting:	526,323.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	32° 13' 29.491 N
		Longitude:	104° 14' 53.558 W
		Grid Convergence:	0.05°

Well:	Sec 12, T24S, R26E					
Well Position	+N-S	0.0 usft	Northing:	445,533.00 usft	Latitude:	32° 13' 29.491 N
	+E-W	0.0 usft	Easting:	526,323.00 usft	Longitude:	104° 14' 53.558 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,284.0 usft	Ground Level:	3,257.0 usft

Wellbore	BHL: 330' FNL & 330' FEL, Sec 18				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	12/31/2009	8.06	60.12	48,718

Design:	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	N-S (usft)	+E-W (usft) Direction (°)
	0.0	0.0	0.0 93.46

Measured	Inclination	Vertical	Depth	N-S	E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	Depth	(usft)	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)		(usft)				(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,077.0	0.00	0.00	9,077.0	0.0	0.0	0.00	0.00	0.00	0.00	KOP @ 9077'
9,984.9	90.79	123.90	9,649.9	-324.0	482.1	10.00	10.00	0.00	123.90	
10,544.0	89.20	90.10	9,650.0	-485.0	1,009.0	6.05	-0.28	-6.05	-92.62	LP: 330' FNL & 2310'
17,761.7	89.20	90.10	9,751.0	-497.0	8,226.0	0.00	0.00	0.00	0.00	BHL: 330' FNL & 330'

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Annabelle 13/18 W2BA Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3284.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3284.0usft (Original Well Elev)
Site:	Annabelle 13/18 W2BA Fed Com #1H	North Reference:	Grid
Well:	Sec 12, T24S, R26E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 330' FEL, Sec 18		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 145' FSL & 1980' FWL, Sec 12									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Annabelle 13/18 W2BA Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3284.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3284.0usft (Original Well Elev)
Site:	Annabelle 13/18 W2BA Fed Com #1H	North Reference:	Grid
Well:	Sec 12, T24S, R26E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 330' FEL, Sec 18		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,077.0	0.00	0.00	9,077.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 9077'									
9,100.0	2.30	123.90	9,100.0	-0.3	0.4	0.4	10.00	10.00	0.00
9,200.0	12.30	123.90	9,199.1	-7.3	10.9	11.3	10.00	10.00	0.00
9,300.0	22.30	123.90	9,294.4	-23.9	35.6	36.9	10.00	10.00	0.00
9,400.0	32.30	123.90	9,383.2	-49.4	73.6	76.4	10.00	10.00	0.00
9,500.0	42.30	123.90	9,462.6	-83.2	123.8	128.6	10.00	10.00	0.00
9,600.0	52.30	123.90	9,530.4	-124.1	184.7	191.9	10.00	10.00	0.00
9,700.0	62.30	123.90	9,584.3	-171.0	254.5	264.3	10.00	10.00	0.00
9,800.0	72.30	123.90	9,622.9	-222.4	331.0	343.8	10.00	10.00	0.00
9,900.0	82.30	123.90	9,644.8	-276.7	411.8	427.8	10.00	10.00	0.00
9,984.9	90.79	123.90	9,649.9	-324.0	482.1	500.8	10.00	10.00	0.00
10,000.0	90.75	122.99	9,649.7	-332.3	494.7	513.8	6.05	-0.28	-6.05
10,100.0	90.47	116.94	9,648.7	-382.2	581.3	603.3	6.05	-0.28	-6.05
10,200.0	90.18	110.89	9,648.1	-422.7	672.7	696.9	6.05	-0.29	-6.05

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Annabelle 13/18 W2BA Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3284.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3284.0usft (Original Well Elev)
Site:	Annabelle 13/18 W2BA Fed Com #1H	North Reference:	Grid
Well:	Sec 12, T24S, R26E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 330' FEL, Sec 18		
Design:	Design #1		

Planned Survey										
Measured			Vertical			Vertical	Dogleg	Build	Turn	
Depth	Inclination	Azimuth	Depth	N-S	E-W	Section	Rate	Rate	Rate	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
10,300.0	89.89	104.85	9,648.1	-453.4	767.8	793.7	6.05	-0.29	-6.05	
10,400.0	89.60	98.80	9,648.5	-473.8	865.6	892.6	6.05	-0.29	-6.05	
10,500.0	89.32	92.75	9,649.4	-483.9	965.1	992.5	6.05	-0.28	-6.05	
10,544.0	89.20	90.10	9,650.0	-485.0	1,009.0	1,036.4	6.05	-0.28	-6.05	
LP: 330' FNL & 2310' FEL, Sec 13										
10,600.0	89.20	90.10	9,650.8	-485.1	1,065.0	1,092.3	0.00	0.00	0.00	
10,700.0	89.20	90.10	9,652.2	-485.3	1,165.0	1,192.2	0.00	0.00	0.00	
10,800.0	89.20	90.10	9,653.6	-485.4	1,265.0	1,292.0	0.00	0.00	0.00	
10,900.0	89.20	90.10	9,655.0	-485.6	1,365.0	1,391.8	0.00	0.00	0.00	
11,000.0	89.20	90.10	9,656.4	-485.8	1,465.0	1,491.6	0.00	0.00	0.00	
11,100.0	89.20	90.10	9,657.8	-485.9	1,565.0	1,591.4	0.00	0.00	0.00	
11,200.0	89.20	90.10	9,659.2	-486.1	1,665.0	1,691.3	0.00	0.00	0.00	
11,300.0	89.20	90.10	9,660.6	-486.3	1,765.0	1,791.1	0.00	0.00	0.00	
11,400.0	89.20	90.10	9,662.0	-486.4	1,865.0	1,890.9	0.00	0.00	0.00	
11,500.0	89.20	90.10	9,663.4	-486.6	1,964.9	1,990.7	0.00	0.00	0.00	
11,600.0	89.20	90.10	9,664.8	-486.8	2,064.9	2,090.5	0.00	0.00	0.00	
11,700.0	89.20	90.10	9,666.2	-486.9	2,164.9	2,190.3	0.00	0.00	0.00	
11,800.0	89.20	90.10	9,667.6	-487.1	2,264.9	2,290.2	0.00	0.00	0.00	
11,900.0	89.20	90.10	9,669.0	-487.3	2,364.9	2,390.0	0.00	0.00	0.00	
12,000.0	89.20	90.10	9,670.4	-487.4	2,464.9	2,489.8	0.00	0.00	0.00	
12,100.0	89.20	90.10	9,671.8	-487.6	2,564.9	2,589.6	0.00	0.00	0.00	
12,200.0	89.20	90.10	9,673.2	-487.8	2,664.9	2,689.4	0.00	0.00	0.00	
12,300.0	89.20	90.10	9,674.6	-487.9	2,764.9	2,789.3	0.00	0.00	0.00	
12,400.0	89.20	90.10	9,676.0	-488.1	2,864.9	2,889.1	0.00	0.00	0.00	
12,500.0	89.20	90.10	9,677.4	-488.3	2,964.8	2,988.9	0.00	0.00	0.00	
12,600.0	89.20	90.10	9,678.8	-488.4	3,064.8	3,088.7	0.00	0.00	0.00	
12,700.0	89.20	90.10	9,680.2	-488.6	3,164.8	3,188.5	0.00	0.00	0.00	
12,800.0	89.20	90.10	9,681.6	-488.8	3,264.8	3,288.3	0.00	0.00	0.00	
12,900.0	89.20	90.10	9,683.0	-488.9	3,364.8	3,388.2	0.00	0.00	0.00	
13,000.0	89.20	90.10	9,684.4	-489.1	3,464.8	3,488.0	0.00	0.00	0.00	
13,100.0	89.20	90.10	9,685.8	-489.2	3,564.8	3,587.8	0.00	0.00	0.00	
13,200.0	89.20	90.10	9,687.2	-489.4	3,664.8	3,687.6	0.00	0.00	0.00	
13,300.0	89.20	90.10	9,688.6	-489.6	3,764.8	3,787.4	0.00	0.00	0.00	
13,400.0	89.20	90.10	9,690.0	-489.7	3,864.8	3,887.3	0.00	0.00	0.00	
13,500.0	89.20	90.10	9,691.4	-489.9	3,964.7	3,987.1	0.00	0.00	0.00	
13,600.0	89.20	90.10	9,692.8	-490.1	4,064.7	4,086.9	0.00	0.00	0.00	
13,700.0	89.20	90.10	9,694.2	-490.2	4,164.7	4,186.7	0.00	0.00	0.00	
13,800.0	89.20	90.10	9,695.6	-490.4	4,264.7	4,286.5	0.00	0.00	0.00	
13,900.0	89.20	90.10	9,697.0	-490.6	4,364.7	4,386.3	0.00	0.00	0.00	
14,000.0	89.20	90.10	9,698.4	-490.7	4,464.7	4,486.2	0.00	0.00	0.00	
14,100.0	89.20	90.10	9,699.8	-490.9	4,564.7	4,586.0	0.00	0.00	0.00	
14,200.0	89.20	90.10	9,701.2	-491.1	4,664.7	4,685.8	0.00	0.00	0.00	
14,300.0	89.20	90.10	9,702.6	-491.2	4,764.7	4,785.6	0.00	0.00	0.00	
14,400.0	89.20	90.10	9,704.0	-491.4	4,864.7	4,885.4	0.00	0.00	0.00	
14,500.0	89.20	90.10	9,705.4	-491.6	4,964.6	4,985.3	0.00	0.00	0.00	
14,600.0	89.20	90.10	9,706.8	-491.7	5,064.6	5,085.1	0.00	0.00	0.00	
14,700.0	89.20	90.10	9,708.2	-491.9	5,164.6	5,184.9	0.00	0.00	0.00	
14,800.0	89.20	90.10	9,709.6	-492.1	5,264.6	5,284.7	0.00	0.00	0.00	
14,900.0	89.20	90.10	9,711.0	-492.2	5,364.6	5,384.5	0.00	0.00	0.00	
15,000.0	89.20	90.10	9,712.4	-492.4	5,464.6	5,484.3	0.00	0.00	0.00	
15,100.0	89.20	90.10	9,713.8	-492.6	5,564.6	5,584.2	0.00	0.00	0.00	
15,200.0	89.20	90.10	9,715.2	-492.7	5,664.6	5,684.0	0.00	0.00	0.00	
15,300.0	89.20	90.10	9,716.6	-492.9	5,764.6	5,783.8	0.00	0.00	0.00	
15,400.0	89.20	90.10	9,718.0	-493.1	5,864.6	5,883.6	0.00	0.00	0.00	

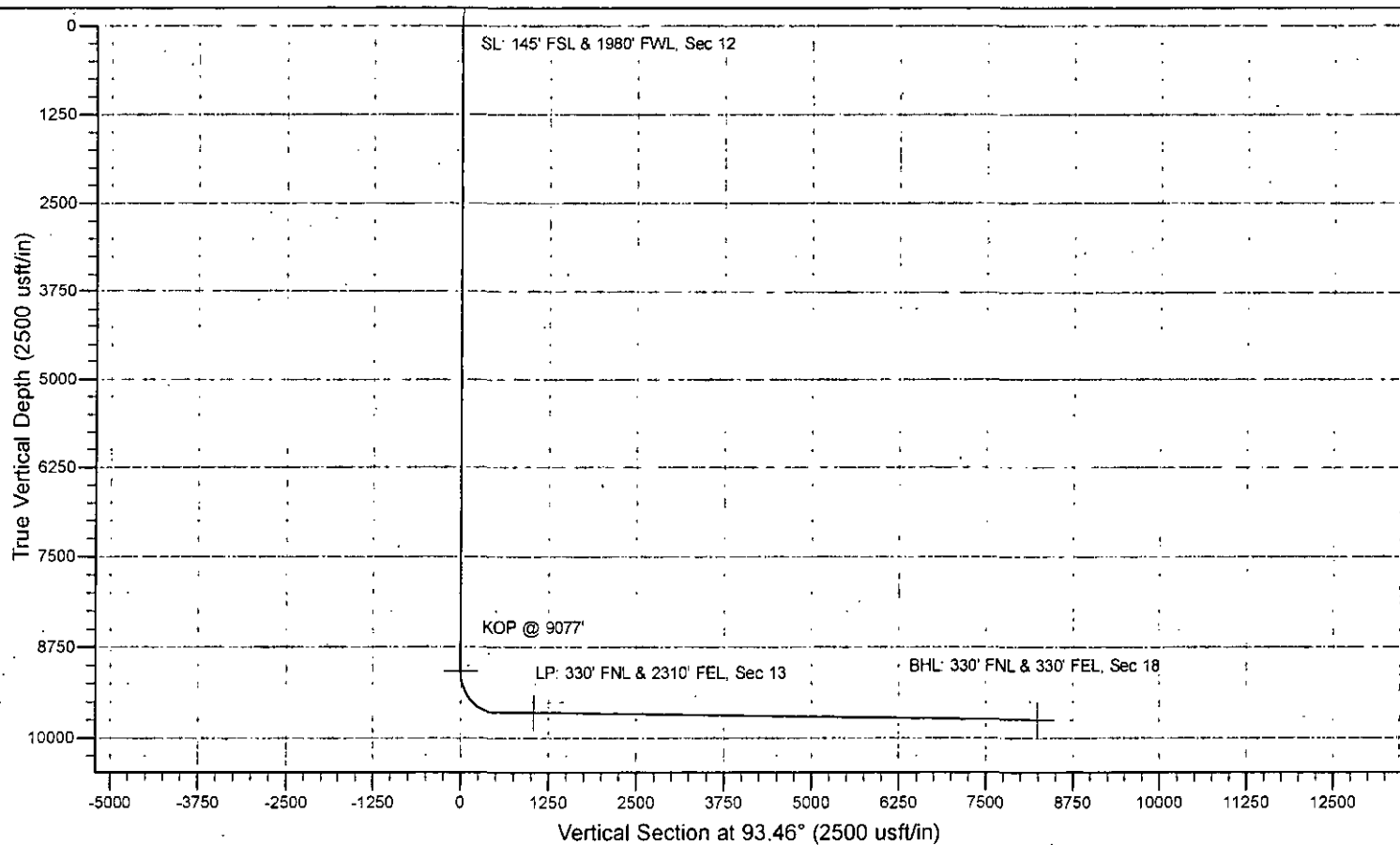
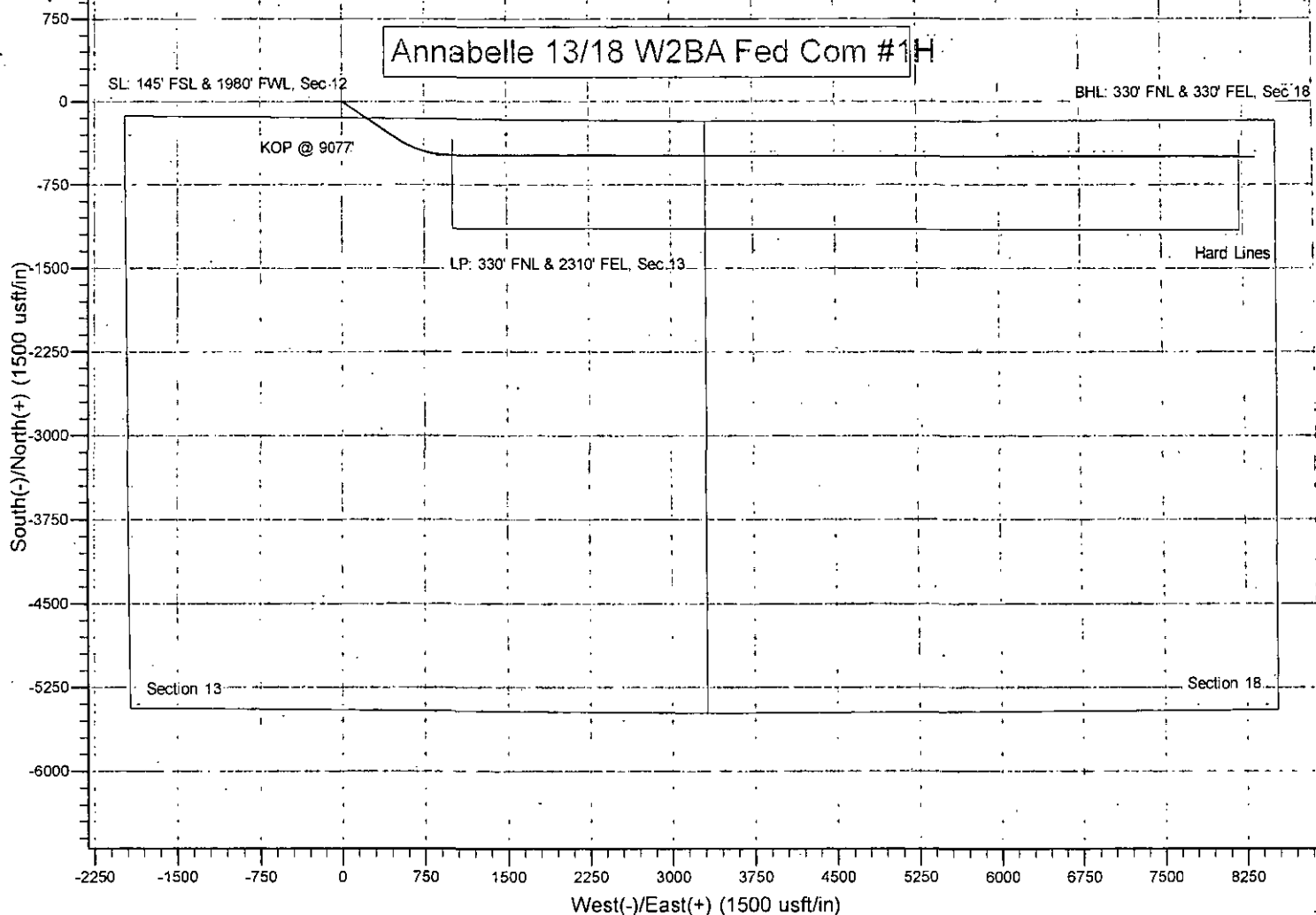
Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Annabelle 13/18 W2BA Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3284.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3284.0usft (Original Well Elev)
Site:	Annabelle 13/18 W2BA Fed Com #1H	North Reference:	Grid
Well:	Sec 12, T24S, R26E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 330' FEL, Sec 18		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,500.0	89.20	90.10	9,719.4	-493.2	5,964.5	5,983.4	0.00	0.00	0.00	
15,600.0	89.20	90.10	9,720.8	-493.4	6,064.5	6,083.3	0.00	0.00	0.00	
15,700.0	89.20	90.10	9,722.2	-493.6	6,164.5	6,183.1	0.00	0.00	0.00	
15,800.0	89.20	90.10	9,723.5	-493.7	6,264.5	6,282.9	0.00	0.00	0.00	
15,900.0	89.20	90.10	9,724.9	-493.9	6,364.5	6,382.7	0.00	0.00	0.00	
16,000.0	89.20	90.10	9,726.3	-494.1	6,464.5	6,482.5	0.00	0.00	0.00	
16,100.0	89.20	90.10	9,727.7	-494.2	6,564.5	6,582.3	0.00	0.00	0.00	
16,200.0	89.20	90.10	9,729.1	-494.4	6,664.5	6,682.2	0.00	0.00	0.00	
16,300.0	89.20	90.10	9,730.5	-494.6	6,764.5	6,782.0	0.00	0.00	0.00	
16,400.0	89.20	90.10	9,731.9	-494.7	6,864.5	6,881.8	0.00	0.00	0.00	
16,500.0	89.20	90.10	9,733.3	-494.9	6,964.4	6,981.6	0.00	0.00	0.00	
16,600.0	89.20	90.10	9,734.7	-495.1	7,064.4	7,081.4	0.00	0.00	0.00	
16,700.0	89.20	90.10	9,736.1	-495.2	7,164.4	7,181.3	0.00	0.00	0.00	
16,800.0	89.20	90.10	9,737.5	-495.4	7,264.4	7,281.1	0.00	0.00	0.00	
16,900.0	89.20	90.10	9,738.9	-495.6	7,364.4	7,380.9	0.00	0.00	0.00	
17,000.0	89.20	90.10	9,740.3	-495.7	7,464.4	7,480.7	0.00	0.00	0.00	
17,100.0	89.20	90.10	9,741.7	-495.9	7,564.4	7,580.5	0.00	0.00	0.00	
17,200.0	89.20	90.10	9,743.1	-496.1	7,664.4	7,680.3	0.00	0.00	0.00	
17,300.0	89.20	90.10	9,744.5	-496.2	7,764.4	7,780.2	0.00	0.00	0.00	
17,400.0	89.20	90.10	9,745.9	-496.4	7,864.4	7,880.0	0.00	0.00	0.00	
17,500.0	89.20	90.10	9,747.3	-496.6	7,964.3	7,979.8	0.00	0.00	0.00	
17,600.0	89.20	90.10	9,748.7	-496.7	8,064.3	8,079.6	0.00	0.00	0.00	
17,700.0	89.20	90.10	9,750.1	-496.9	8,164.3	8,179.4	0.00	0.00	0.00	
17,761.7	89.20	90.10	9,751.0	-497.0	8,226.0	8,241.0	0.00	0.00	0.00	
BHL: 330' FNL & 330' FEL, Sec 18										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	N-S (usft)	E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SL: 145' FSL & 1980' FV - plan hits target center - Point	0.00	0.01	0.0	0.0	0.0	445,533.00	526,323.00	32° 13' 29.491 N	104° 14' 53.558 W	
KOP @ 9077' - plan hits target center - Point	0.00	0.01	9,077.0	0.0	0.0	445,533.00	526,323.00	32° 13' 29.491 N	104° 14' 53.558 W	
LP: 330' FNL & 2310' FE - plan hits target center - Point	0.00	0.00	9,650.0	-485.0	1,009.0	445,048.00	527,332.00	32° 13' 24.683 N	104° 14' 41.816 W	
BHL: 330' FNL & 330' FE - plan hits target center - Point	0.00	0.00	9,751.0	-497.0	8,226.0	445,036.00	534,549.00	32° 13' 24.498 N	104° 13' 17.801 W	

Annabelle 13/18 W2BA Fed Com #1H





GATES E & S NORTH AMERICA, INC.
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: Tim.Cantu@gates.com
WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :

AUSTIN DISTRIBUTING

Customer Ref. :

4060578

Invoice No. :

500506

Test Date:

4/30/2015

Hose Serial No.:

D-043015-7

Created By:

JUSTIN CROPPER

Product Description:

10K3.548.0CK4.1/1610KFLGE/E LE

End Fitting 1 :

4 1/16 10K FLG

End Fitting 2 :

4 1/16 10K FLG

Gates Part No. :

4773-6290

Assembly Code :

L36554102914D-043015-7

Working Pressure :

10,000 PSI

Test Pressure :

15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager :

QUALITY

Date :

4/30/2015

Signature :

Production:

PRODUCTION

Date :

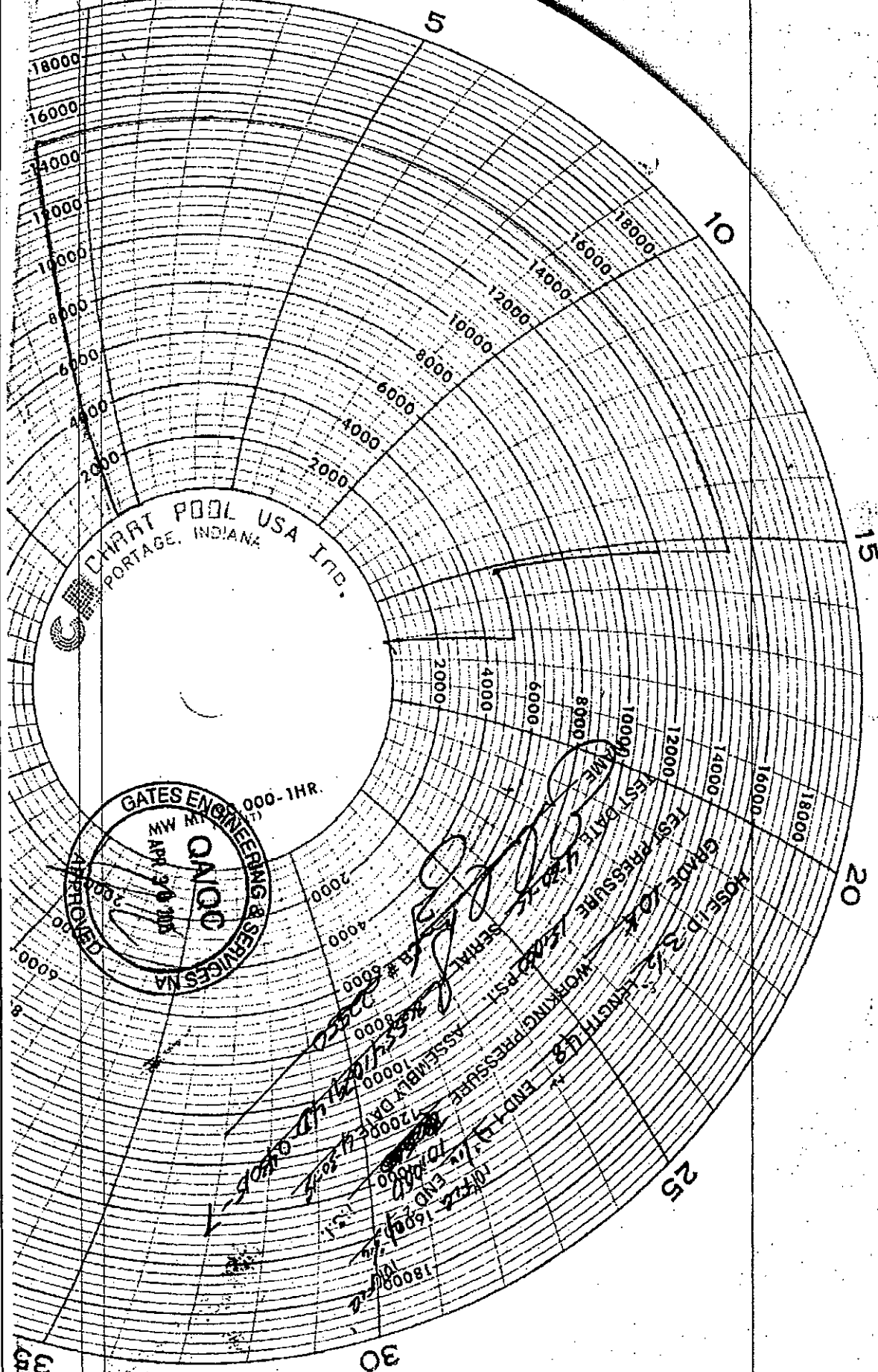
4/30/2015

Signature :

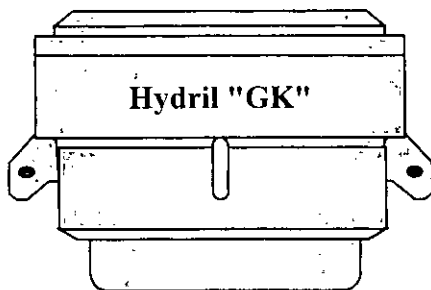
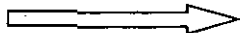
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60 MIN.

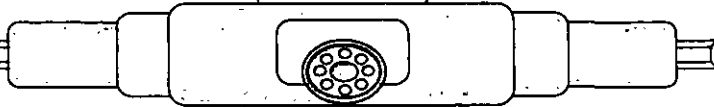
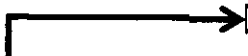


Hydril "GK"
13 5/8" 5M

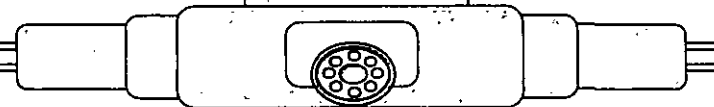


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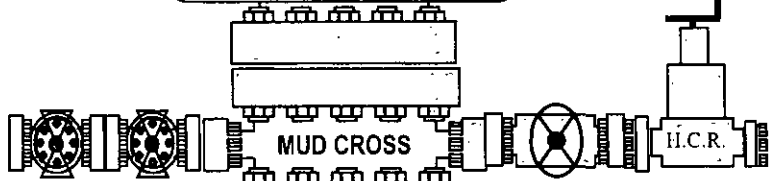
Cameron Type U
13 5/8" 5M



4 1/2"x 5 7/8" VBR

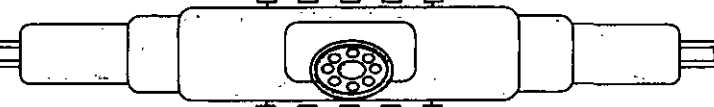
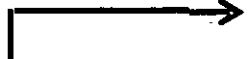


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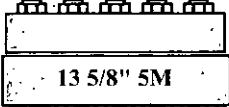


MUD CROSS

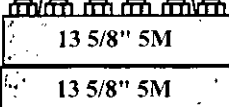
H.C.R.



4 1/2"x 5 7/8" VBR



13 5/8" 5M



13 5/8" 5M

13 5/8" 5M

