Form 3160-5 (June 2015)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

SUNDRY NOTICES AND REPORTS ON WELLS

**BUREAU OF LAND MANAGEMENT** 

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

5. Lease Serial No. NMNM43744

16	If Indian	Allottee	or Tribe	Name

Do not use this	is form for proposals to drill or to r		111111111111111111111111111111111111111	1
abandoned we	II. Use form 3160-3 (APD) for such	proposals.	6. If Indian, Allottee	or Tribe Name
SUBMIT IN	TRIPLICATE - Other instructions or	n page 2	7. If Unit or CA/Agre	eement, Name and/or No.
Type of Well	ner		8. Well Name and No PLATINUM MDP	1 34-3 FEDERAL COM 171
2. Name of Operator OXY USA INCORPORATED	Contact: SARAH E ( E-Mail: SARAH_CHAPMAN@C		9. API Well No: 30-015-45230-	00-X1
3a. Address 5 GREENWAY PLAZA SUITE HOUSTON, TX 77046-0521	3b. Phone N Ph: 713-3	lo. (include area code) 350-4997	10. Field and Pool or PURPLE SAGE	Exploratory Area E-WOLFCAMP (GAS)
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)		11. County or Parish,	State
Sec 34 T23S R31E NWNW 22	20FNL 1027FWL		EDDY COUNT	Y, NM
12. CHECK THE AI	PPROPRIATE BOX(ES) TO INDIC.	ATE NATURE OI	F NOTICE, REPORT, OR OT	HER DATA
TYPE OF SUBMISSION		TYPE OF	ACTION	
Notice of Intent	☐ Acidize ☐ De	epen	☐ Production (Start/Resume)	■ Water Shut-Off
	☐ Alter Casing ☐ Hy	draulic Fracturing	☐ Reclamation	■ Well Integrity
☐ Subsequent Report	☐ Casing Repair ☐ Ne	ew Construction	☐ Recomplete	<b>⊠</b> Other
☐ Final Abandonment Notice	☐ Change Plans ☐ Pla	ug and Abandon	□ Temporarily Abandon	Change to Original A PD
	☐ Convert to Injection ☐ Plo	ug Back	■ Water Disposal	
OXY USA Inc. respectfully red 1. BHL is moving 110' west to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Updated Well Control  Please find updated documen Thank you.	4-string)	Carlsl	oad Field Officerator Copy	ce
14. I hereby certify that the foregoing is	true and correct.  Electronic Submission #466568 verifi  For OXY USA INCORPOR  mitted to AFMSS for processing by PF	ATED, sent to the	Carlsbad	
	CHAPMAN	1 '	ATORY SPECIALIST	
<del> </del>			···	
Signature (Electronic S	Submission)	Date 05/23/20	)19 ·	
	THIS SPACE FOR FEDER	AL OR STATE (	OFFICE USE	·
Approved By NDUNGU KAMAU		TitlePFTROLF	UM ENGINEER	Date 07/10/2019
Conditions of approval, if any, are attached	d. Approval of this notice does not warrant or uitable title to those rights in the subject lease act operations thereon.	1		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a crime for any statements or representations as to any matter	person knowingly and within its jurisdiction.	willfully to make to any department o	r agency of the United
(Instructions on page 2) ** BLM REV	ISED ** BLM REVISED ** BLM F	REVISED ** BLM	REVISED ** BLM REVISE	:D **

Rw/10-29.19.

#### Revisions to Operator-Submitted EC Data for Sundry Notice #466568

**Operator Submitted** 

Sundry Type: APDCH

NOI

Lease:

NMNM43744

Agreement:

Operator:

OXY USA INC. P.O. BOX 4294 HOUSTON, TX 77210 Ph: 713-350-4997

Admin Contact:

SARAH E CHAPMAN

REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503

Ph: 713-350-4997

Tech Contact:

SARAH E CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503

Ph: 713-350-4997

Location:

State: County:

NM EDDY COUNTY

Field/Pool:

PURPLE SAGE WOLFCAMP

Well/Facility:

PLATINUM MDP1 34-3 FEERAL COM 171H Sec 34 T23S R31E NWNW 220FNL 1027FWL 32.267579 N Lat, 103.770884 W Lon

**BLM Revised (AFMSS)** 

NOI

NMNM43744

OXY USA INCORPORATED 5 GREENWAY PLAZA SUITE 110 . HOUSTON, TX 77046-0521 Ph: 713.350.4816

SARAH E CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997

SARAH E CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997

NM

EDDY

PURPLE SAGE-WOLFCAMP (GAS)

PLATINUM MDP1 34-3 FEDERAL COM 171H

Sec 34 T23S R31E NWNW 220FNL 1027FWL

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** OXY USA INCORPORATED

LEASE NO.: | NMNM43744

WELL NAME & NO.: | 171H:PLATINUM MDP1 34-3 FDC

**SURFACE HOLE FOOTAGE:** 220'/N & 1027'/W **BOTTOM HOLE FOOTAGE** 20'/S & 330'/E

**LOCATION:** | T-23S, R-31E, S34. NMPM

COUNTY: | EDDY, NM

COA

H2S	Yes	€ No	
Potash	None	C Secretary	<sup>™</sup> R-111-P
Cave/Karst Potential	• Low	(* Medium	← High
Variance	None	Flex Hose	Other
Wellhead	Conventional	Multibowl	• Both
Other	☐ 4 String Area	☐ Capitan Reef	□ WIPP
Other	Fluid Filled	∇ Cement Squeeze	Pilot Hole
Special Requirements	☐ Water Disposal	₩ COM	☐ Unit

#### ALL PREVIOUS COAS STILL APPLY

#### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

#### **B. CASING**

#### **Primary Casing Design:**

- 1. The 13-3/8 inch surface casing shall be set at approximately 582 feet (a minimum of 70 feet (Eddy County) 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 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 will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- 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 9-5/8 inch surface casing shall be set at approximately 4358 feet. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

#### **Option 1 (Single Stage):**

Cement to surface. If cement does not circulate see B.1.a, c-d above.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

#### **Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

2<sup>nd</sup> Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the 7-5/8 inch 2<sup>nd</sup> intermediate casing is:

#### **Option 1 (Single Stage):**

• Cement to surface. If cement does not circulate, contact the appropriate BLM office.

#### **Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM. Excess calculates to negative 11% - additional cement might be required.

- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back 500 feet into the previous casing. Operator shall provide method of verification. Excess calculates to 20% additional cement might be required.

#### C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

#### Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.
- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 2<sup>nd</sup> intermediate casing

shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.

#### **Option 2:**

- 1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

#### D. SPECIAL REQUIREMENT (S)

#### **BOP** Break Testing Variance

- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOP Break Testing operations.
- A full BOP test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOP test will be required.

#### **Offline Cementing**

• Contact the BLM prior to the commencement of any offline cementing procedure.

#### **Communitization Agreement**

• The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all

- such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

#### GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Chaves and Roosevelt Counties
    Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
    During office hours call (575) 627-0272.
    After office hours call (575)
  - Eddy County
     Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - ☑ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)393-3612
- 1. 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.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. 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.
- 2. Wait on cement (WOC) for Potash Areas: 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 for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
- 3. 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.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. 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.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### 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. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: 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.
- 3. 5M or higher 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. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. 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. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

NMK7102019

District 1.
1622 N. Franck Dr., Hobbs, NAI S8240
Phone (175) 393-5161 Fax: (475) 393-0710
Device B.
811 S. Fax: 55, Anasis, NAI 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III.
1000 Ris Braus Road, Amo, NAI 87310
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV.
120 S. St. Franch Dr., Sant Fr. NAI 8194
Phone: (505) 476-3460 Fax: (505) 476-3462

30-015-45230

API Number

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

Wolframp

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Purple Sage

Pool Code

982:20

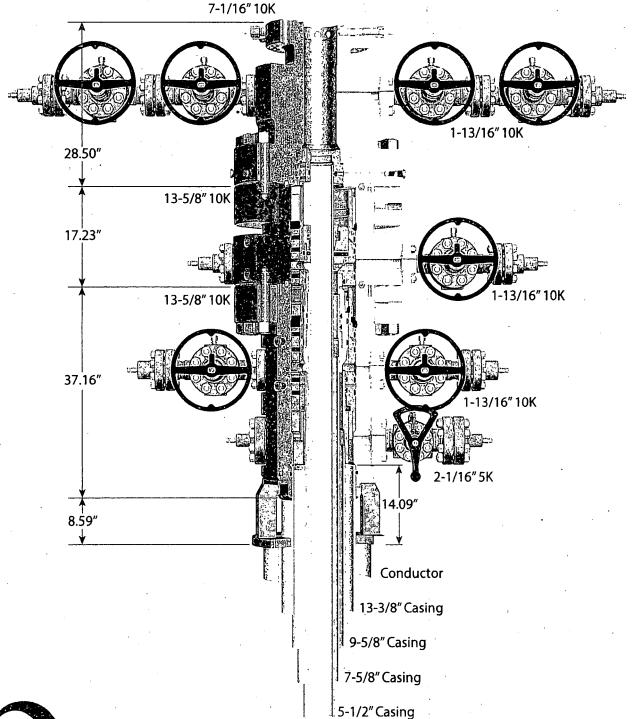
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			93		X=714533 LAT.: N 33 LONG.: W 1	2.2391856	5		Certifica	ne islamba	15079

WO# 180115WL-e (Rev. B) (KA)

Intent 🔨 As Drilled						
API#						
30 - 015 - 45 23 D Operator Name:	···	Property Name:			Well Number	
		rroperty wante.			well maniber	
OXY WA Inc.		Planum MDVI 3	34-3 Federa	1 Con	1714	
, )		•				
	•	•				
Kick Off Point (KOP)		•				
UL Section Township Range	Lot Feet	From N/S Fee	.			
D 34 235 31E	60 Longitu		36 WG	T EDO	<u> </u>	
32.26804570		7171393		NA		
10.100						
First Take Point (FTP)						
UL Section Township Range	Lot Feet	From N/S Fee	4		٨.	
5 34 235 31E Latitude	Longitu		30 West	NAD	<u> </u>	
32. 2479081		.773194		8 CAN		
		1.1	<del></del>			
Last Take Point (LTP)						
UL Section Township Range	Lot Feet	From N/S Feet	From E/W	County S		
M   3   245   31E     Latitude	Longitu	Snuth   330	West	( C DU )		
32.2594056		3.7731410	1	NAUBS		
	<del></del>	7 1 1	`			
Is this well the defining well for the	Horizontal Sr	pacing Unit?				
-	monizontai sp	vacing onit:				
·						
Is this well an infill well?						
If infill is yes please provide API if a	vailable, Oper	ator Name and well i	number for De	fining well for	Horizontal	
Spacing Unit.						
API#		•				
Operator Name:	Т	Dranasty Name			NA/all Nivers Is a	
Operator Name:		Property Name:			Well Number	

KZ 06/29/2018

# Four String





#### PERFORMANCE DATA

## TMK UP TORQ™ DQW Technical Data Sheet

5.500 in

20.00 lbs/ft

P110 CY

psi

psi

lbs

lbs

psi psi

<b>Tubular Parameters</b>				
Size	5.500	in	Minimum Yield	110,000
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000
Grade	P110 CY		Yield Load	641,000
PE Weight	19.81	lbs/ft	Tensile Load	729,000
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640
Nominal ID	4.778	in	Collapse Pressure	11,110
Drift Diameter	4.653	in		•
Nom. Pipė Body Area	5.828	lin²		37

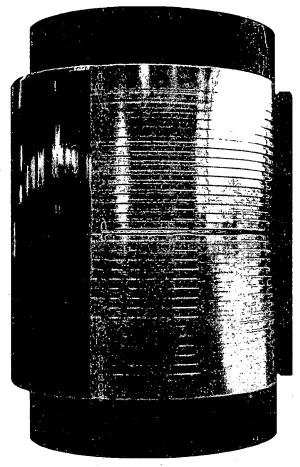
<b>Connection Parameters</b>		
Connection OD	6.050	in
Connection ID	4.778	in T
Make-Up Loss	4.324	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi
Uniaxial Bending	92	1 100 ft
	-	

Make-Up Torques		
Min. Make-Up Torque	14,000	ft-lbs
Opt. Make-Up Torque	16,000	ft-lbs
Max. Make-Up Torque	18,000	ft-lbs
Operating Torqu <b>e</b>	36,800	ft-lbs
Yield Torque	46,000	ft-lbs

Printed on: March-05-2019



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#### PERFORMANCE DATA

## TMK UP DQX Technical Data Sheet

Nom. Pipe Body Area

5.500 in

20.00 lbs/ft

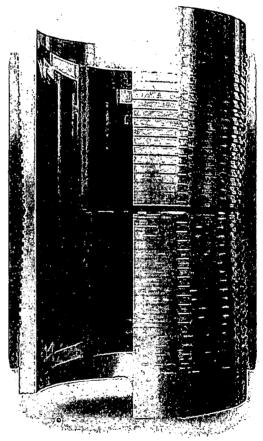
P-110

<b>Tubular Parameters</b>					***************************************
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in		! !	

Connection Parameters		<del></del> , .
Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in²
Tension Efficiency	100 0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

Make-Up Torques		
Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs

Printed on: July-29-2014



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IPSCO

#### TECHNICAL DATA SHEET TMK UP DQX 5.5 X 20 P110

TUBULAR PARAMETERS		PIPE BODY PROPERTIES	
Nominal OD, (inch)	5.500	PE Weight, (lbs/ft)	19.81
Wall Thickness, (inch)	0.361	Nominal Weight, (lbs/ft)	20.00
Pipe Grade	P110	Nominal ID, (inch)	4.778
Coupling	Regular	Drift Diameter, (inch)	4.653
Coupling Grade	P110	Nominal Pipe Body Area, (sq inch)	5.828
Drift .	Standard	Yield Strength in Tension, (klbs)	641
CONNECTION PARAMETERS	,	Min. Internal Yield Pressure, (psi)  Collapse Pressure, (psi)	12 640
Connection OD (inch)	6.05		11 110
Connection ID, (inch)	4.778	internal (*essure	
Make-Up Loss, (inch)	4.122		1
Connection Critical Area, (sq inch)	5.828		<b>北京</b> 和19
Yield Strength in Tension, (klbs)	641	18 Halling	1000年
Yeld Strength in Compression, (kibs)	641		The property of
Tension Efficiency	100%		1 d d
Compression Efficiency	100%	Section 1	the state of the
Min. Internal Yield Pressure, (psi)	12 640		1
Collapse Pressure, (psi)	11 110	and designed in the second	gg star for 1 o
Uniaxial Bending (deg/100ft)	91.7		2
MAKE-UP TORQUES		_ 5 5 5 5 5 5 5	
Yield Torque, (ft-lb)	20 600	ratural frassic	Alternative Correspondence Page 1986
Minimum Make-Up Torque, (ft-lb)	11 600		. 1 type, <del>Madage</del>
Optimum Make-Up Torque, (ft-lb)	12 900	•	
Maximum Make-Up Torque, (ft-lb)	14 100		
l, l-	Cou	pling Length	
Wall Thkkness	Make Up Loss	Box Critical Cross Section	
1	·······································		
ad a did	Section		Diameter Box O.D.

NOTE: The content of this Technoni Deta Sheet is far general Information only said does not guarance performance or mit by fainers for a partial vial outpose, which only a compose, which only a compose with a properties of the properties of the properties of the contection. Information fluid common one operation personnels in Information approach of the latest information in Information of the Common strengths in Information approach does not that one own part to except the latest information approach of the Information and the Information of the Information

Print date 12/07/2017 18:09

#### PERFORMANCE DATA

### TMK UP SF TORQ™ Technical Data Sheet

Nom: Pipe Body Area

5.500 in

in<sup>2</sup>

5.828

20.00 lbs/ft

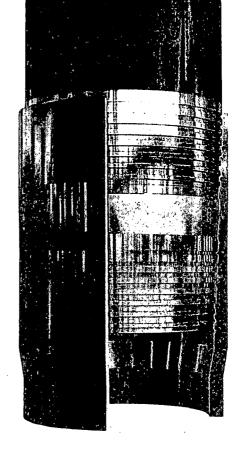
P110 HC

Tubular Parameters	;				
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 HC		Yield Load	641,000	ibs
PE Weight	19.81	lbs/ft	Tensile Load	728,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	psi
Nominal ID	4.778	in	Collapse Pressure	12,780	psi
Drift Diameter	4.653	in		• •	

Connection Parameters		
Connection OD	5.777	in
Connection ID	4.734	in
Make-Up Loss	5.823	in
Critical Section Area	5.875	in <sup>2</sup>
Tension Efficiency	90.0	%
Compression Efficiency	90.0	%
Yield Load In Tension	576,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	12,780	psi .
Uniaxial Bending	83	°/ 100 ft

Make-Up Torques		
Min. Make-Up Torque	15,700	ft-lbs
Opt. Make-Up Torque	19,600	ft-lbs
Max. Make-Up Torque	21,600	ft-lbs
Operating Torque	29,000	ft-lbs
Yield Torque	36,000	ft-lbs

Printed on: February-22-2018



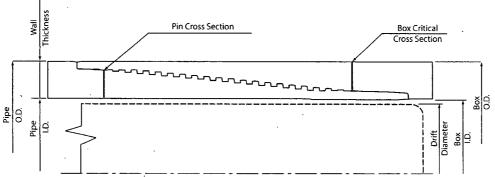
#### NOTE

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#### TECHNICAL DATA SHEET TMK UP FJ 7.625 X 26.4 L80 HC

TUBULAR PARAMETERS		PIPE BODY PROPERTIES
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft) 25.56
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft) 26.40
Pipe Grade	L80 HC	Nominal ID, (inch) 6.969
Drift	Standard	Drift Diameter, (inch) 6.844
001115071011 0101157700		Nominal Pipe Body Area, (sq inch) 7.519
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs) 601
Connection OD (inch)	7.63	Min. Internal Yield Pressure, (psi) 6 020
Connection ID, (inch)	6.975	Collapse Pressure, (psi) 3 910
Make-Up Loss, (inch)	4.165	
Connection Critical Area, (sq inch)	2.520	Internal Pressure
Yield Strength in Tension, (klbs)	347	
Yeld Strength in Compression, (klbs)	347	
Tension Efficiency	58%	1007 API SCOVISO
Compression Efficiency	58%	
Min. Internal Yield Pressure, (psi)	6 020	
Collapse Pressure, (psi)	3 910	Compression
Uniaxial Bending (deg/100ft)	28.0	
MAKE-UP TORQUES	······································	
Yield Torque, (ft-lb)	22 200	VME WE
Minimum Make-Up Torque, (ft-lb)	12 500	
Optimum Make-Up Torque, (ft-lb)	13 900	External Pressure — Concernor — — — — — — — — — — — — — — — — — — —
Maximum Make-Up Torque, (ft-lb)	15 300	n
Nall :kness	Pin Cross Sectio	n Box Critical

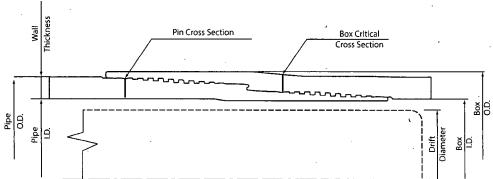


NOTE: The content of this Testing at Data Sheer is for general information only and does not quarantee performance or high friends for a particular purpose, which only a port performance of a performance of high connection information and operation parameters. This information superaced all more versions for this connection information that distinted or downbaded it. no longer controlled by Tetra and reight not be the latest information. According to the connection information are connected information mentioned by the connected of the connected information and the connected of the connected information and the connected of the connected information and the connected of the connected information and the connected of the connected information and the connected of the connected o

Print date: 07/10/2018 20:11

#### TECHNICAL DATA SHEET TMK UP SF 7.625 X 26.4 L80 HC

TUBULAR PARAMETERS		PIPE BODY PROPERTIES	
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)	25.56
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)	26.40.
Pipe Grade	L80 HC	Nominal ID, (inch)	6.969
Drift	· Standard	Drift Diameter, (inch)	6.844
		Nominal Pipe Body Area, (sq inch)	7.519
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs)	601
Connection OD (inch)	7.79	Min. Internal Yield Pressure, (psi)	6 020
Connection ID, (inch)	6.938	Collapse Pressure, (psi)	3 910
Make-Up Loss, (inch)	6.029		
Connection Critical Area, (sq inch)	5.948	Internal Pressure	
Yield Strength in Tension, (klbs)	533		337
Yeld Strength in Compression, (klbs)	533		
Tension Efficiency	89%	100% 0815(37150)	
Compression Efficiency	89%		
Min. Internal Yield Pressure, (psi)	6 020	Compression	
Collapse Pressure, (psi)	3 910	Compressible 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Tension
Uniaxial Bending (deg/100ft)	42.7		/
MAKE-UP TORQUES			Control of the or
Yield Torque, (ft-lb)	22 600		ME *
Minimum Make-Up Torque, (ft-lb)	15 000		
Optimum Make-Up Torque, (ft-lb)	. 16 500	External Pressure	Connection Post lists
Maximum Make-Up Torque, (ft-lb)	18 200		
wall nickness	Pin Cross Section	on Box Critical Cross Section	



NOTE: The contens of the Teornical Data Sheer is no general information only and does not quarantee performance or imply times for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. This information supersed-all processions for this connection information that is brittle or developed on the process of the specific installation and operation parameters. This information supersed-all process continues the process of the

Print date: 07/10/2018 20:00

#### OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
PLATINUM MDP1 34-3 FED COM
PLATINUM MDP1 34-3 FED COM 171H

**WB00** 

Plan: Permitting Plan

# **Standard Planning Report**

21 May, 2019

#### Oxy

#### Planning Report

Database HOPSPP

**ENGINEERING DESIGNS** 

Company Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: PLATINUM MDP1 34-3 FED COM Well: PLATINUM MDP1 34-3 FED COM 171H

Wellbore: WB00

Design: Permitting Plan Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26.5' @ 3449.70ft RKB=26.5' @ 3449.70ft

Grid

Minimum Curvature

PRD NM DIRECTIONAL PLANS (NAD 1983) Project

Map System: Geo Datum:

US State Plane 1983

North American Datum 1983

Map Zone:

New Mexico Eastern Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

PLATINUM MDP1 34-3 FED COM Site

Site Position:

Мар

+N/-S

+E/-W

Northing:

461,352,44 usft

32° 16' 1.502765 N

From:

Easting:

714.923.95 usft

Longitude:

103° 46' 18.211063 W

**Position Uncertainty:** 

50.00 ft Slot Radius: 13.200 in

**Grid Convergence:** 

0.30

PLATINUM MDP1 34-3 FED COM 171H

Well Position

181.49 ft

259.04 ft

Northing: Easting:

715,182.97 usft

Longitude:

**Position Uncertainty** 

2.00 ft

Wellhead Elevation:

**Ground Level:** 

103° 46' 15.183263 W

Wellbore **WB00** ample Dâte Magnetics Model Name Dip Angle Field Strength

HDGM 3/28/2018 6.88 60.02 48,086

Design. Permitting Plan Audit Notes: Version: Phase: PROTOTYPE Tie On Depth: 0.00 Depth From (TVD Direction 3 3 0.00 0.00 0.00 183.60

Plan Sections									and a second	
Measured			Vertical <sup>®</sup>			Dögleg	Build	Turn		
Depth (ft)	nclination (°)	Azimuth*' (°))	√(ft)	.+N/-S .(ft)	+E/-W/ (ft)	(°/100ft)	((°/100ft)	Rate (*/100ft)	TFO: (°)	Target
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5,264.98	10.00	317.46	5,262.44	32.06	-29.42	2.00	2.00	0.00	317.46	
10,512.40	10.00	317.46	10,430.15	703.40	-645.48	0.00	0.00	0.00	0.00	
11,444.46	10.00	179.74	11,356.24	681.91	-700.31	2.00	0.00	-14.78	-158.56	
12,246.11	90.16	179.74	11,829.70	116.02	-697.72	10.00	10.00	0.00	0.00	FTP (Platinum
22,695.86	90.16	179:74	11,799.70	-10,333.58	-649.93	0.00	0.00	0.00	0.00	PBHL (Platinum
1										

#### Planning Report -

Database:
Company
Project
Site:
Well
Wellbore:
Design:

HOPSPP

🎉 ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983) PLATINUM MDP1 34-3 FED COM

PLATINUM MDP1 34-3 FED COM 171H . WB00

Permitting Plan

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26.5' @ 3449.70ft RKB=26.5' @ 3449.70ft

Grid

Designation	Permitting Pi	Manager and Manager and A		Charles and the state of the st			angan manining and participates as a same	p superfrape reasons a gate-rapid.	more manine manine and B
Planned Survey	A STATE OF COMME	CHECKING CHILD	WESTER THE PARTY OF THE	The section of the se	A) AUGUSAN AND AND AND AND AND AND AND AND AND A	NAMES OF STREET OF THE	Wikescher Tamerti	randadan b	management and compared where of
	ALL STREET	Sec. 33 . 46.87. 3	Carried Land Laboration	Seamer of	TTREETERS	রম্বরণ অব না	CALEST SULLAN	er ved ve	energa para
				A Long to the state of the same	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			321, 25 (1988)	
Measured			Vertical <sup>a</sup>	A la constant	والمراهد	Vertical	Dogleg	Build	Turn/ Sign
Depth.	Inclination	Azimuth	₫2Depth	******************************		Section	Rate:	Rate	Rate
2.31.75mg (ft)	(1)	(*)	i (n)	32(ft) (*)	(ft)	(m) (5)	(°/100ft) 🐔 🗧	(°/100ft)	(°/100ft)??
The little that the same of the	e . The military and the control of	Hart, to Hand Shirt			THE PERSON		SPRANTELL		en l'almantaire
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00		0.00	500.00						
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	. 0.00	0.00	1,000.00	0.00	0.00	.0.00	0.00	0.00	. 0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00		
1	0.00		1,200.00	0.00			0.00	0.00	0.00
1,200.00		0.00			0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1						•			0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	.0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
			·						
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00		0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
· ·	0.00		4,765.00	0.00	0.00	0.00	0.00	0.00	0.00
4,765.00		0.00							
4,800.00	0.70	317.46	4,800.00	0.16	-0.14	-0.15	2.00	2.00	0.00
4,900.00	2.70	317.46	4,899.95	2.34	-2,15	-2.20	2.00	2.00	0.00
5,000.00	4.70	317.46	4,999.74	7.10	-6.51	-6.67	2.00	2.00	0.00
5,100.00	6.70	317.46	5,099.24	14,42	-13.23	-13.56	2.00	2.00	0.00
5,200.00	8.70	317.46	5,198.33	24.29	-22.29	-22.84	2.00	2.00	0.00
0,200.00	<u> </u>		-,						

#### Planning Report

Company: Project:

HOPSPP

**ENGINEERING DESIGNS** 

PRD NM DIRECTIONAL PLANS (NAD 1983) PLATINUM MDP1 34-3 FED COM

PLATINUM MDP1 34-3 FED COM 171H

Site: Well: Wellbore: \* WB00

Design: Permitting Plan Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26.5' @ 3449.70ft

RKB=26.5' @ 3449.70ft

Grid

M. William Programmer and the Committee of the Committee	CONTRACTOR CONTRACTOR	e i de communicación.	A SECTION OF THE PARTY OF THE P	want of the state of the same of	ATTE ATTEMATION	The state of the state of the			
Planned Survey						Charles and a second second	E Management Management of the		Contract of Section 1
		TAKE TO SEE						STATE OF THE PARTY	BELLOCK KIND
Measured			Vertical	That A Francis City	100	Vertical	Dogleg	Bulld ;	Turn
23 . B. B. B. H. B. L. L. L. B. B. B. B. B. B. B. B. B. B. B. B. B.			Depth	THE PARTY OF THE P		Section	Rate	'Râte	Rate
(ft)	nčlinatión			+N/-S-1/	* † EJ-VV	30000			(°/100ft)
				(ft)	(n)(-2-2-2)			illouit)	(HIDOR)
5,264.98	10.00	317.46	5,262,44	32.06	-29.42	-30.15	2.00	2.00	0.00
3,204.30	10.00	517.40	•		-23.42	-30.13	2.00	2.00	0.00
5,300.00	10.00	317.46	5,296.93	36.54	-33.54	-34.37	0.00	0.00	0.00
5,400.00	10.00	317.46	5,395.41	49.34	-45.28	46.40	0.00	0.00	0.00
5,500.00	10.00	317.46	5,493.90	62.13	-57.02	-58.43	0.00	0.00	0.00
5,600.00	10.00	317.46	5,592.38	74.93	-68.76	-70.46	0.00	0.00	0.00
5,700.00	10.00	317.46	5,690.86	87.72	-80.50	-82:49	0.00	0.00	0.00
	10.00	247.40	5 700 04	400.54	00.04	04.50	0.00	0.00	2.00
5,800.00	10.00	317.46	5,789.34	100.51	-92.24	-94.53	0.00	0.00	0.00
5,900.00	10.00	317.46	5,887.82	113.31	-103.98	106.56	0.00	0.00	0.00
6,000.00	10.00	317.46	5,986.30	126.10	-115.72	-118.59	0.00	0.00	0.00
6,100.00	10.00	317.46	6,084.78	138.89	-127.46	-130.62	0.00	0.00	0.00
6,200.00	10.00	317.46	6,183.26	151.69	-139.20	-142.65	0.00	0.00	0.00
6,300.00	10.00	317.46	6,281.74	164.48	-150.94	-154.68	0:00	0.00	0.00
6,400.00	10.00	317.46	6,380,22	177.27	-162.68	-166.71	0.00	0.00	0.00
6,500.00	10.00	317.46	6,478,70	190.07	-174,42	-178.75	0.00	0.00	0.00
6,600.00	10.00	317.46	6,577,19	202.86	-186.16	-190.78	0.00	0.00	0.00
6,700.00	10.00	317.46	6,675.67	215.66	-197.90	-202.81	0.00	0.00	0.00
6,800.00	10.00	317.46	6,774.15	228.45	-209.64	-214.84	0.00	0.00	0.00
6,900.00	10.00	317.46	6,872.63	241.24	-221.38	-226.87	0.00	0.00	0.00
7,000.00	10.00	317.46	6,971.11	254.04	-233.12	-238.90	0.00	0.00	0.00
7,100.00	10.00	317.46	7,069.59	266.83	-244.86	-250.94	0.00	0.00	0.00
7,200.00	10.00	317.46	7,168.07	279.62	-256.60	-262.97	0.00	0.00	0.00
7.300.00	10.00	317.46	7,266.55	292.42	-268.34	-275.00	0.00	0.00	0.00
7,400.00	10.00	317.46	7,365.03	305.21	-280.08	-287.03	0.00	0.00	0.00
7,500.00	10.00	317.46	7,463.51	318.01	-291.82	-299.06	0.00	0.00	0.00
7,600.00	10.00	317.46	7,561.99	330.80	-303.56	-311.09	0.00	0.00	0.00
7,700.00	10.00	317.46	7,660.48	343.59	-315.30	-323.12	0.00	0.00	0.00
1									0.00
7,800.00	10.00	317.46	7,758.96	356.39	-327.04	-335.16	0.00	0.00	0.00
7,900.00	10.00	317.46	7,857.44	369.18	-338.78	-347.19	0.00	0:00	0.00
8,000.00	10.00	317.46	7,955.92	381.97	-350.52	-359.22	0.00	0.00	0.00
8,100.00	10.00	317.46	8,054.40	394.77	-362.26	-371.25	0.00	0.00	0.00
8,200.00	10.00	317.46	8,152.88	407.56	-374.00	-383.28	0.00	0.00	0.00
8,300.00	10.00	317.46	8,251.36	420.35	-385.74	-395,31	0.00	0.00	0.00
8,400.00	10.00	317.46	8,349.84	433.15	-397.48	-407.35	0.00	0.00	0.00
8,500.00	10.00	317.46	8,448,32	445.94	-409.22	-419.38	0.00	0.00	0.00
8,600.00	10.00	317.46	8,546.80	458.74	-420.96	-431,41	0.00	0.00	0.00
8,700.00	10.00	317.46	8,645.28	471.53	-432.70	-443.44	0.00	0.00	0.00
			•						,
8,800.00	10.00	317.46	8,743.77	484.32	-444.44	-455.47	0.00	0.00	0.00
8,900.00	10.00	317.46	8,842.25	497.12	-456.18	-467.50	0.00	0.00	0.00
9,000.00	10.00	317.46	8,940.73	509.91	-467.92	-479.53	0.00	0.00	0.00
9,100.00	10.00	317.46	9,039.21	522.70	-479.66	-491.57	0.00	0.00	0.00
9,200.00	10.00	317.46	9,137.69	535.50	-491.40	-503.60	0.00	0.00	0.00
9,300.00	10.00	317.46	9,236.17	548.29	-503.14	-515.63	0.00	0.00	0.00
9,400.00	10.00	317.46	9,334.65	561.08	-514.88	-527.66	0.00	0.00	0.00
9,500.00	10.00	317.46	9,433.13	573.88	-526.62	-539.69	0.00	0.00	0.00
9,600.00	10.00	317.46	9,531.61	586.67	-538.36	-551.72	0.00	0.00	0.00
9,700.00	10.00	317.46	9,630.09	599.47	-550.10	-563.75	0.00	0.00	0.00
									į
9,800.00	10.00	317.46	9,728.58	612.26	-561.84	-575.79	0.00	0.00	0.00
9,900.00	10.00	317.46	9,827.06	625.05	-573.58	-587.82	0.00	0.00	0.00
10,000.00	10.00	317.46	9,925.54	637.85	-585.32	-599.85	0.00	0.00	0.00
10,100.00	10.00	317.46	10,024.02	650.64	-597.07	-611.88	0.00	0.00	0.00
10,200.00	10.00	317.46	10,122.50	663.43	-608.81	-623.91	0.00	0.00	0.00
10,300.00	10.00	317.46	10,220.98	676.23	-620.55	-635.94	0.00	0.00	0.00
10,300.00	10.00	317.46	10,319.46	689.02	-620.55 -632.29	-635.94 -647.98	0.00	0.00	0.00
10,500.00	10.00	317.46	10,319.40	701.81	-644.03	-660.01	0.00	0.00	0.00
10,000.00		017,70	10,117.07	701.01	J 17.00	000.01	0.00	5.55	0.00

#### Planning Report

Database HOPSPP ("Coal Co-ordinate Reference")
Company ENGINEERING DESIGNS TVD Reference:
Project: PRD NM DIRECTIONAL PLANS (NAD 1983) MDIRECTIONS
Site: PLATINUM MDP1 34-3 FED COM North Reference:
Well PLATINUM MDP1 34-3 FED COM 171H Survey Calculation Method:
Wellbore W800
Design: Permitting Plan

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26.5' @ 3449.70ft RKB=26.5' @ 3449.70ft

Grid

Design:	rmitting Plan			CARTE	String City.				transmining representation and the
Planned Survey 3	MEDIOWENSKI VAL	DECEMBER OF STREET	AL STATEMENT OF STREET	er bester en minerale pen m	CONTRACT CON	TALESCO STATE OF THE PARTY.	A CHIEF CARL SERVEY STORE	CONTRACTOR DESCRIPTION	aranumpantum nu sport d'un sp 1
		THE WAR						SM POST	The state of the s
Measured	CAR THE	14 17 J. J. C.	Vertical	14. 电阻器		Vertical .	Dogleg	Bulld,	Turn
Depth	lination	Azimuth	∂ Depth ⊾ 。	+N/-S	"+E/W"	Section"	Rate	Rate	Rate
	2(3)		(ft)	(ft)	(ft)* ; **	(ft)	(°/100ft).	(°/100ft)	(°/100ft)
SPECIAL SECTION OF THE SECTION OF TH	L. Land The Extra	د د منسانصاقایسامدند؛ شنا	All the Prof airly to tonne water a cost Lane	emprovement in the company of the contract of	cian her milde	GATTAN, EAR	THE SERVE	<b>STATE</b>	state and a large
10,512.40	10.00	317.46	10,430.15	703.40	-645.48	-661.50	0.00	0.00	0.00
10,600.00	8.39	313.07	10,516.63	713.37	-655.30	-670.83	2.00	-1.83	-5.01
10,700.00	6.65	305.54	10,615.76	721.72	-665.34	-678.54	2.00	-1.74	-7.53
10,800.00	5.09	293.10	10,715.24	726.83	-674.13	-683.08	2.00	-1.55	-12.44
10,900.00	3.96	271.94	10,814.93	728.69	-681.67	-684.46	2.00	-1.13	-21.16
11,000.00	3.66	241.83	10,914.72	727.29	-687.94	-682.68	2.00	-0.30	-30.11
11,100.00	4.38	214.81	11,014.48	722.65	-692.94	-677.73	2.00	0.71	-27.02
11,200.00	5.73	197.91	11,114.10	714.77	-696.65	-669.63	2.00	1.36	-16.90
11,300.00	7.39	187.98	11,213.44	703.65	-699.08	-658.38	2.00	1.65	-9.93
11,400.00	9.18	181.78	11,312.40	689.31	-700.22	-644.00	2.00	1.79	-6.20
11,444.46	10.00	179.74	•	681.91	-700.31	-636.61	2.00	1.85	-4.58
11,500.00	15.55	179.74	11,410.38	669.63	-700.25	-624.36	10.00	10.00	0.00
11,600.00	25.55	179.74	11,503.90	634.57	-700.09	-589.37	10.00	10.00	0.00
11,700.00	35.55	179.74	11,589.90	583.80	-699.86	-538.72	10.00	10.00	0.00
11,800.00	45.55	179.74	11,665.78	518.86	-699.56	-473.93	10.00	10.00	0.00
11,900.00	55.55	179.74	11,729.24	441.74	-699.21	-396.98	10.00	10.00	0.00
12,000.00	65.55	179,74	11,778.34	354.77	-698.81	-310.21	10.00	10.00	0.00
12,100.00	75.55	179.74	11,811.59	260.60	-698.38	-216.25	10.00	10.00	0.00
12,200.00	85.55	179.74	11,827.98	162.08	-697.93	-117.95	10.00	10.00	0.00
12,246.11	90.16	179.74	11,829.70	116.02	-697.72	-71.99	10.00	10.00	0.00
12,300.00	90.16	179.74	11,829.55	62.12	-697.47	-18.22	0.00	0.00	0.00
12,400.00	90.16	179.74	11,829,26	-37.88	-697.02	81.55	0.00	0.00	0.00
12,500.00	90.16	179.74	11,828.97	<b>-1</b> 37.87	-696.56	181.32	0.00	0.00	0.00
12,600.00	90.16	179.74	11,828.68	-237.87	-696.10	281.10	0.00	0.00	0.00
12,700.00	90.16	179.74	11,828.40	-337.87	-695.64	380.87	0.00	0.00	0.00
12,800.00	90.16	179.74	11,828.11	-437.87	-695.19	480.64	0.00	0.00	0.00
12,900.00	90.16	179.74	11,827.82	-537.87	-694.73	580.41	0.00	0.00	0.00
13,000.00	90.16	179.74	11,827.54	-637.87	-694.27	680.19	0.00	0.00	0.00
13,100.00	90.16	179.74	11,827.25	-737.87	-693.82	779.96	0.00	0.00	0.00
13,200.00	90.16	179.74	11,826.96	-837.86	-693.36	879.73	0.00	0.00	0.00
13,300.00 13,400.00	90.16 90.16	179.74 179.74	11,826.67 11,826.39	-937.86 -1,037.86	-692.90 -692.44	979.50	0.00 0.00	0.00 0.00	0.00
,		179.74		-1,037.00		1,079.28			0.00
13,500.00	90.16	179.74	11,826.10	-1,137.86	-691.99	1,179.05	0.00	0.00	0.00
13,600.00	90.16	179.74	11,825.81	-1,237.86	-691.53	1,278.82	0.00	0.00	0.00
13,700.00 13,800.00	90.16 90.16	179.74 179.74	11,825.53 11,825.24	-1,337.86 -1,437.85	-691.07 -690.61	1,378.60 1,478.37	0.00 0.00	0.00 0.00	0.00
13,900.00	90.16	179.74	11,824.95	-1,437.65 -1,537.85	-690.16	1,478.37 1,578.14	0.00	0.00	0.00 0.00
,			•						
14,000.00	90.16	179.74	11,824.67	-1,637.85	-689.70	1,677.91	0.00	0.00	0.00
14,100.00 14,200.00	90.16 90.16	179.74 179.74	11,824.38 11,824.09	-1,737.85 -1,837.85	-689.24 -688.78	1,777.69 1,877.46	0.00 0.00	0.00 0.00	0.00 0.00
14,200.00	90.16	179.74	11,823.80	-1,037.85 -1,937.85	-688.33	1,677.46	0.00	0.00	0.00
14,400.00	90.16	179.74	11,823.52	-2,037.85	-687.87	2,077.00	0.00	0.00	0.00
14,500.00	90.16 90.16	179.74 179.74	11,823.23 11,822.94	-2,137.84	-687.41 -686.95	2,176.78 2,276.55	0.00 0.00	0.00 0.00	0.00 0.00
14,600.00 14,700.00	90.16	179.74	11,822.94	-2,237.84 -2,337.84	-686.95 -686.50	2,276.55	0.00	0.00	0.00
14,700.00	90.16	179.74	11,822.37	-2,337.84 -2,437.84	-686.04	2,376.32	0.00	0.00	0.00
14,900.00	90.16	179.74	11,822.08	-2,537.84	-685.58	2,575.87	0.00	0.00	0.00
. 15,000.00	90.16	179.74	11,821.79	-2,637.84	-685.13	2,675.64	0.00	0.00	0.00
15,100.00	90.16	179.74	11,821.51	-2,737.84	-684.67	2,775.41	0.00	0.00	0.00
15,200.00 15,300.00	90.16 90.16	179.74 179.74	11,821.22 11,820.93	-2,837.83 -2,937.83	-684.21 -683.75	2,875.18 2,974.96	0.00 0.00	0.00 0.00	0.00 0.00
15,300.00	90.16	179.74	11,820.93	-2,937.83 -3,037.83	-683.30	2,974.96 3,074.73	0.00	0.00	0.00
15,500.00	90.16	179.74	11,820.36	-3,137.83	-682.84	3,174.50	0.00	0.00	0.00
15,600.00	90.16	179.74	11,820.07	-3,237.83	-682.38	3,274.28	0.00	0.00	0.00

#### Planning Report

Database Company Project Site

MARKET DE BERT Y ARTOUT DE LA TREPLACION DE BERTHARDE DE BERTHARDE DE BERTHARDE DE BERTHARDE DE BERTHARDE DE B HOPSPP

**ENGINEERING DESIGNS** 

PRD NM DIRECTIONAL PLANS (NAD 1983) PLATINUM MDP1 34-3 FED COM

PLATINUM MDP1 34-3 FED COM 171H

Well: WB00 Design:

Permitting Plan

Local Co-ordinate Reference TVD Reference: MD) Reference: North Reference: Survey, Calculation Method:

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26,5' @ 3449,70ft

RKB=26.5' @ 3449.70ft

Grid

Planned Survey		The manufacture on the	POLIT ACRES AND ACTOR	CONTRACTOR OF STREET	MARIA MENERATERA	THE SECTION ASSESSMENT	aks janksineraan oteksi.	Living Primary (1980	mediatria e de la completa del completa del completa de la completa del la completa del la completa de la completa de la completa de la completa de la completa de la completa de la completa de la completa de la completa de la completa de la compl
					STANK!				
Measured Depth			Vertical -			Vertical Section	Dogleg Rate	Build /	Turn
(ft)	(s)	Azimuth	Depth (ft)	±N/-S (ft)	+EJ-W (ft):−	Section :			Rate (°/100ft)
	his the said			40000000000000000000000000000000000000		n a		Scale Patrice.	
15,700.00	90.16	179.74	11,819.78	-3,337.83	-681.92	3,374.05	0.00	0.00	0.00
15,800.00 15,900.00	90.16 90.16	179.74 179.74	11,819.50 11,819.21	-3,437.83 -3,537.82	-681.47 -681.01	3,473.82 3,573.59	0.00 0.00	0.00 0.00	0.00
								•	
16,000.00	90.16	179.74	11,818.92	-3,637.82	-680.55	3,673.37	0.00	0.00	0.00
16,100.00 16,200.00	90.16 90.16	179.7 <b>4</b> 179.74	11,818.64 11,818.35	-3,737.82 -3.837.82	-680.09 -679.64	3,773.14 3,872.91	0.00 0.00	0.00 0.00	0.00 0.00
16,300.00	90.16	179.74	11,818.06	-3,937.82	-679.18	3,972.68	0.00	0.00	0.00
16,400.00	90.16	179.74	11,817.77	-4,037.82	-678.72	4,072.46	0.00	0.00	0.00
16,500.00	90.16	179.74	11,817.49	-4,137.82	-678.27	4,172.23	0.00	0.00	0.00
16,600.00	90.16	179.74	11,817.20	-4,237.81	-677.81	4,272.00	0.00	0.00	0.00
16,700.00	90.16	179.74	11,816.91	-4,337.81	-677.35	4,371.77	0.00	0.00	0.00
16,800.00	90.16	179.74	11,816.63	-4,437.81	-676.89	4,471.55	0.00	0.00	0.00
16,900.00	90.16	179.74	11,816.34	-4,537.81	-676.44	4,571.32	0.00	0.00	0.00
17,000.00	90.16	179.74	11,816.05	-4,637.81	-675.98	4,671.09	0.00	0.00	0.00
17,100.00 17,200.00	90.16 90.16	179.74 179.74	11,815.77 11,815.48	-4,737.81 -4,837.81	-675.52 -675.06	4,770.87 4,870.64	0.00 0.00	0.00 0.00	0.00 0.00
17,300.00	90.16	179.74	11,815.19	-4,937.80	-674.61	4,970.41	0.00	0.00	0.00
17,400.00	90.16	179.74	11,814.90	-5,037.80	-674.15	5,070.18	0.00	0.00	0.00
17,500.00	90.16	179.74	11,814.62	-5,137.80	-673.69	5,169.96	0.00	0.00	0.00
17,600.00	90.16	179.74	11,814.33	-5,237.80	-673.23	5,269.73	0.00	0.00	0.00
17,700.00	90.16	179.74	11,814.04	-5,337.80	-672.78	5,369.50	0.00	0.00	0.00
17,800.00	90.16	179.74	11,813.76	-5,437.80	-672.32	5,469.27	0.00	0.00	0.00
17,900.00	90.16	179.74	11,813.47	-5,537.80	-671.86	5,569.05	0.00	0.00	0.00
18,000.00	90.16	179.74	11,813.18	-5,637.79	-671.40	5,668.82	0.00	0.00	0.00
18,100.00 18,200.00	90.16 90.16	179.7 <b>4</b> 179.7 <b>4</b>	11,812.89 11,812.61	-5,737.79 -5,837.79	-670.95 -670. <b>4</b> 9	5,768.59 5,868.36	0.00 0.00	0.00 0.00	0.00 0.00
18,300.00	90.16	179.74	11,812.32	-5,937.79	-670.03	5,968.14	0.00	0.00	0.00
18,400.00	90.16	179.74	11,812.03	-6,037.79	-669.58	6,067.91	0.00	0.00	0.00
18,500.00	90.16	179.74	11,811.75	-6,137.79	-669.12	6,167.68	0.00	0.00	0.00
18,600.00	90.16	179.74	11,811.46	-6,237.79	-668.66	6,267.46	0.00	0.00	0.00
18,700.00	90.16	179.74	11,811.17	-6,337.78	-668.20	6,367.23	0.00	0.00	0.00
18,800.00	90.16	179.74	11,810.88	-6,437.78	-667.75 667.20	6,467.00	0.00	0.00	0.00
18,900.00	90.16	179.74	11,810.60	-6,537.78	-667.29	6,566.77	0.00	0.00	0.00
19,000.00	90.16 90.16	179.74 179.74	11,810.31 11,810.02	-6,637.78 -6,737.78	-666.83 -666.37	6,666.55 6,766.32	0.00 0.00	0.00 0.00	0.00 0.00
19,100.00 19,200.00	90.16	179.74	11,810.02	-6,737.78 -6,837.78	-665.92	6,866.09	0.00	0.00	0.00
19,300.00	90.16	179.74	11,809.45	-6,937.77	-665.46	6,965.86	0.00	0.00	0.00
19,400.00	90.16	179.74	11,809.16	-7,037.77	-665.00	7,065:64	0.00	0.00	0.00
19,500.00	90.16	179.74	11,808.88	-7,137.77	-664.54	7,165.41	0.00	0.00	0.00
19,600.00	90.16	179.74	11,808.59	-7,237.77	-664.09	7,265.18	0.00	0.00	0.00
19,700.00	90.16	179.74	11,808.30	-7,337.77	-663.63	7,364.95	0.00	0.00	0.00
19,800.00 19,900.00	90.16 90.16	179.74 179.74	11,808.01 11,807.73	-7,437.77 -7,537.77	-663.17 -662.71	7,464.73 7;564.50	0.00 0.00	0.00 0.00	0.00 0.00
			•						
20,000.00	90.16 90.16	179.74 179.74	11,807.44 11,807.15	-7,637.76 -7,737.76	-662.26 -661.80	7,664.27 7,764.05	0.00 0.00	0.00	0.00 0.00
20,200.00		179.74	. 11,806.87	-7,837.76 -7,837.76	-661.34	7,863.82	0.00	0.00	0.00
20,300.00	90.16	179.74	11,806.58	-7,937.76	-660.89	7,963.59	0.00	0.00	0.00
20,400.00	90.16	179.7 <b>4</b>	11,806.29	-8,037.76	-660.43	8,063.36	0.00	0.00	0.00
20,500.00	90.16	179.74	11,806.00	-8,137.76	-659.97	8,163.14	0.00	0.00	0.00
20,600.00	90.16	179.74	11,805.72	-8,237.76	-659.51	8,262.91	0.00	0.00	0.00
20,700.00	90.16	179.74	11,805.43	-8,337.75	-659.06	8,362.68	0.00	0.00	0.00
20,800.00 20,900.00	90.16 90.16	179.74 179.74	11,805,14 11,804.86	-8,437.75 -8,537.75	-658.60 -658.14	8,462.45 8,562.23	0.00 0.00	0.00 0.00	0.00 0.00
									_
21,000.00	90.16	179.74	11,804.57	-8,637.75	-657.68	8,662.00	0.00	0.00	0.00

#### Planning Report

HOPSPP

Database: HOPSPP
Company ENGINEERING
Project: PLATINUM MDF
Well PLATINUM MDF
Wellbore: WB00
Design: Permitting Plan **ENGINEERING DESIGNS** 

PRD NM DIRECTIONAL PLANS (NAD 1983) PLATINUM MDP1 34-3 FED COM PLATINUM MDP1 34-3 FED COM 171H

L'Ocal Co-ordinate Reference: TVD Reference: MD Reference: North/Reference: Survey/Calculation/Method:

Well PLATINUM MDP1 34-3 FED COM 171H

RKB=26.5' @ 3449.70ft RKB=26.5' @ 3449.70ft

Grid

Planned Survey	The transfer of the	P. M. M. V. D. DEAM STAN	an in an an ann an an an an an an an an an a	DE L'ALL'ESTE PRESENTATION	and the attention of the	TELL VETTERSTELL SLOT / FOR V	THE STATES OF THE STATE OF THE STATES OF THE	recommended was se	MATERIAL WAY AND SELECTION OF THE
			NET STAN	PARTER NO.					
Measured			Vertical 🛝	ESPACE THE		Vertical 🖖	Doğleg 🗀 🗀	Build 💮	Turn
Depth : li	clination	Aziműth	Depth	+N/-S∈	+E/-W	Section /	6. 15 F THE LOOK A THE TOTAL	Rate:	, Rate
[ft]	COMMON!	(4)	26. (ft)	f (ft) 4	(fi)	* (ft)	(°/100ft) * / (°	/100ft)	(°/100ft)
21,100.00	90.16	179.74	11,804.28	-8,737.75	-657.23	8,761.77	0.00	0.00	0.00
21,200.00	90.16	179.74	11,803.99	-8,837.75	-656.77	8,861.54	0.00	0.00	0.00
21,300.00	90.16	179.74	11,803.71	-8,937.75	-656.31	8,961.32	0.00	0.00	0.00
21,400.00	90.16	179.74	11,803.42	-9,037.74	-655.85	9,061.09	0.00	0.00	0.00
21,500.00	90.16	179.74	11,803.13	-9,137.74	-655.40	9,160.86	0.00	0.00	0.00
21,600.00	90.16	. 179.74	11,802.85	-9,237.74	-654.94	9,260.64	0.00	0.00	0.00
21,700.00	90.16	179.74	11,802.56	-9,337.74	-654.48	9,360.41	0.00	0.00	0.00
21,800.00	90.16	179.74	11,802.27	-9,437.74	-654.03	9,460.18	0.00	0.00	0.00
21,900.00	90.16	179.74	11,801.99	-9,537.74	-653.57	9,559.95	0.00	0.00	0.00
22,000.00	90.16	179,74	11,801.70	-9,637.74	-653.11	9,659.73	0.00	0.00	0.00
22,100.00	90.16	179.74	11,801.41	-9,737.73	-652.65	9,759.50	0.00	0.00	0.00
22,200.00	90.16	179.74	11,801.12	-9,837.73	-652.20	9,859.27	0.00	0.00	0.00
22,300.00	90.16	179.74	11,800.84	-9,937.73	-651.74	9,959.04	0.00	0.00	0.00
22,400.00	90.16	179.74	11,800.55	-10,037.73	-651.28	10,058.82	0.00	0.00	0.00
22,500.00	90.16	179.74	11,800.26	-10,137.73	-650.82	10,158.59	0.00	0.00	0.00
22,600.00	90.16	179.74	11,799.98	-10,237.73	-650.37	10,258.36	0.00	0.00	0.00
22,695.86	90.16	179.74	11,799.70	-10,333.58	-649.93	10,354.00	0.00	0.00	0.00

	10 mm	p Dir TVD (f) (f)			Northing (usft)	Easting (usft)	Latitude:	Eongitude
PBHL (Platinum MDP1 - plan hits target center - Point	0.00	0.00 11,799.70	-10,333.58	-649.93	451,200.94	714,533.08	32° 14' 21.068361 N	103° 46' 23.380295
FTP (Platinum MDP1 - plan hits target center - Point	0.00	0.00 11,829.70	116.02	-697.72	461,649.93	714,485.29	32° 16' 4.469271 N	103° 46' 23.301910

Plan Annotations  Measured Depth (ft)	Vertical Depth (ff)	Local Coord +N/-S (ft)	inates +E/-W	Comment
4,765.00	4,765.00	0.00	0.00	Build 2.00°/100'
5,264.98	5,262.44	32.06	-29.42	Hold 10.00° Tangent
10,512.40	10,430.15	703.40	-645.48	Turn 2.00°/100'
11,444.46	11,356.24	681.91	-700.31	KOP, Build 10.00°/100'
12,246.11	11,829.70	116.02	-697.72	Landing Point
22,695.86	11,799.70	-10,333.58	-649.93	TD at 22695.86' MD



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: PLATINUM MDP1 34-3 FED COM

Well: PLATINUM MDP1 34-3 FED COM 171H

Wellbore: WB00

Design: Permitting Plan

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

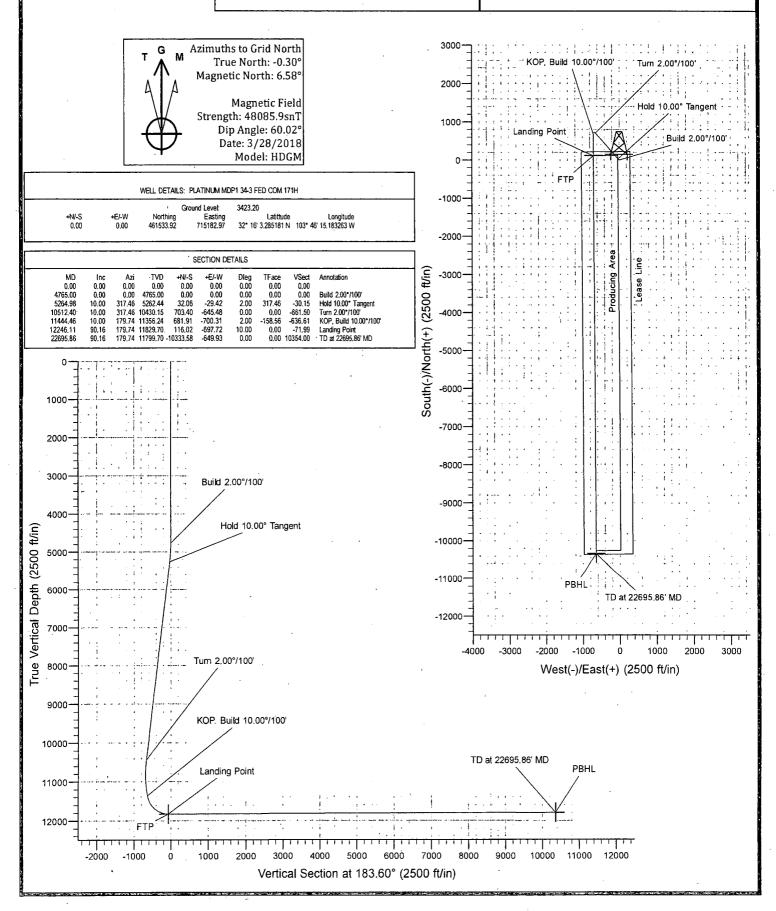
Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



#### 1. Geologic Formations

TVD of target	11829'	Pilot Hole Depth	N/A
MD at TD:	22695'	Deepest Expected fresh water:	532'

#### **Delaware Basin**

Formation	TVD - RKB	Expected Fluids
Rustler	532	
Salado	878	Brine
Castile	2,808	Brine
Lamar/Delaware	4,308	Brine
Bell Canyon	4,334	Oil/Gas
Cherry Canyon	. 5,228	Oil/Gas
Brushy Canyon	6,488	Losses
Bone Spring	8,152	Oil/Gas
1st Bone Spring	9,216	Oil/Gas
2nd Bone Spring	9,826	Oil/Gas
3rd Bone Spring	11,015	Oil/Gas
Wolfcamp	11,477	Oil/Gas

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

#### 2. Casing Program

									Buoyant	Buoyant
Hôle Size (in)	Casing Int	erval	Csg. Size	Weight >	200	<b>国际的</b> 国际	SEASON	CE B	Body SF	Joint SF.
Hole Size (III)	From (ft)	To (ft)	(in) ,	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension.	Tension
17.5	0	582	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4358	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	11344	7.625	26.4	L-80 HC	SF (0 ft to 4000 ft) FJ (4000 ft to 11344 ft)	1.125	1.2	1.4	1.4
6.75	0	22695	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Value	s will meet	or Exceed	

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

<sup>\*</sup>Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage, we will drop a cancelation cone and not pump the second stage.

<sup>\*</sup>Oxy requests the option to run production casing with DQX, SF TORQ, and/or DQW TORQ connections to accommodate hole conditions or drilling operations.

#### **Annular Clearance Variance Request**

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

- 1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
- 2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	Y or N	
Is casing new? If used, attach certification as required in Onshore Order #1	Y	
Does casing meet API specifications? If no, attach casing specification sheet.		
Is premium or uncommon casing planned? If ye's attach casing specification sheet.	Y	
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y	
justification (loading assumptions, casing design criteria).	Y	
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	17	
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 <sup>rd</sup> string cement tied back		
500' into previous casing?		
	- W.S.	
Is well located in R-111-P and SOPA?	Y	
If yes, are the first three strings cemented to surface?	Y	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	Y	
	Walter Comment	
Is well located in high Cave/Karst?	N	
If yes, are there two strings cemented to surface?		
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?		
REDUNDED TO THE REPORT OF THE SECOND REPORT OF THE RESERVE OF THE RESERVE OF THE PROPERTY OF THE PARTY OF THE RESERVE OF THE PARTY OF T	The Table of the Control of the Cont	
Is well located in critical Cave/Karst?	N	
If yes, are there three strings cemented to surface?		

#### 3. Cementing Program

Casing String	# Šks	Wt. (lb/gal)	Yld (ft3/sack):	H20 (gal/sk)_	500# Comp Strength (hours)	Ślurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	619	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	931	12.9	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	226	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage	(Tail Slurry) t	o be pumped	as Bradenhea	nd Squeeze fro	om surface, d	own the Intermediate annulus
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A	· N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	355	12.9	1.92	10.410	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	869	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft),	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	582	100%
Intermediate (Lead)	0	3858	50%
Intermediate (Tail)	3858	4358	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6738	11344	5%
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6738	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10844	22695	20%

#### **Offline Cementing**

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
- 2. Land casing.
- 3. Fill pipe with kill weight fluid, and confirm well is static.
  - a. If well is not static notify BLM and kill well.
  - b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
- 4. Set and pressure test annular packoff.
- 5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed.

- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange.
- 8. If well is not static notify BLM and kill well prior to cementing or nippling up for further remediation.
- 9. Install offline cement tool.
- 10. Rig up cement equipment.
  - a. Notify BLM prior to cement job.
- 11. Perform cement job.
- 12. Confirm well is static and floats are holding after cement job.
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

#### 4. Pressure Control Equipment

BOP installed and tested before drilling, which hole?	Size?	Min. Required WP	Typ	e		Tested to:
		3M	Annu	lar	✓	70% of working pressure
12.25" Hole	13-5/8"	,	Blind l	Ram	✓	
12.25" Hole	13-3/8	21/1	Pipe F	lam		250 mai / 2000 mai
		3M	Double	Ram	✓	250 psi / 3000 psi
			Other*			
		5M	Annu	lar	✓	70% of working pressure
8.5" Hole	13-5/8"	5M	Blind Ram		<b>✓</b>	
8.3 1016			Pipe Ram			250 mai / 5000 mai
			Double Ram		✓	250 psi / 5000 psi
			Other*			·
		5M	Annu	lar	✓	70% of working pressure
· 6.75" Hole	13-5/8"	1014	Blind Ram		✓	
			Pipe Ram			250 mai / 10000 mai
		10M	Double	Ram	✓	250 psi / 10000 psi
			Other*			·

<sup>\*</sup>Specify if additional ram is utilized.

Per BLM's Memorandum No. NM-2017-008: Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see attached Well Control Plan.

Oxy will utilize a 5M annular with a 10M BOPE stack. The 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.

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.

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.

Y Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. 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. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

#### **BOP Break Testing Request**

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.

#### 5. Mud Program

De .	pth		Weight	Viscosity.	Water Loss
From (ft)	To (ft)	rype	(ppg) ]	viscosity.	water Luss.
0 .	582	Water-Based Mud	8.6-8.8	40-60	N/C
582	4358	Saturated Brine- Based Mud	9.8-10.0	35-45	N/C
4358	11344	Water-Based or Oil- Based Mud	8.0-9.6	38-50	N/C
11344	22695	Water-Based or Oil- Based Mud	9.5-12.0	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?   PVT/MD Totco/Visual Monitoring	
--	--

#### 6. Logging and Testing Procedures

Logg	ing, Coring and Testing				
Yes	Will run GR from TD 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.			
No	Drill stem test? If yes, explain				
No	Coring? If yes, explain				
Addi	tional logs planned	Interval			
No	Resistivity	·			
No	Density				
No	CBL				
Yes	Mud log	ICP - TD			
No	PEX				

#### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7382 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	175°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

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.

N H2S is present
Y H2S Plan attached

#### 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.  • We plan to drill the two well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
<ul> <li>Will more than one drilling rig be used for drilling operations? If yes, describe.</li> <li>Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.</li> </ul>	Yes

#### Total estimated cuttings volume: 1716.3 bbls.

#### Attachments

- x Directional Plan
- x H2S Contingency Plan
- \_x\_\_ Flex III Attachments
- x Spudder Rig Attachment
- x Premium Connection Specs

#### 9. Company Personnel

Name	<u>Title</u>	Office Phone	Mobile Phone
Kaitlyn Daniels	Drilling Engineer	713-497-2104	512-424-9870
Margaret Giltner	Drilling Engineer Supervisor	713-366-5026	210-683-8480
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

#### Oxy Well Control Plan

#### A. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the >5M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Pilot hole and Lateral sections, 10M requirement

Component	<b>OD</b>	Preventer	RWP
Drillpipe	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR	10M
	'	Upper 3-1/2 - 5-1/2" VBR	
HWDP	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR	10M
		Upper 3-1/2 - 5-1/2" VBR	
Drill collars and MWD tools	4-3/4" – 5-1/2"	Lower 3-1/2 - 5-1/2" VBR	10M
		Upper 3-1/2 - 5-1/2", VBR	
Mud Motor	4-3/4"	Lower 3-1/2 - 5-1/2" VBR	10M
		Upper 3-1/2 - 5-1/2" VBR	
Production casing	5-1/2"	Lower 3-1/2 - 5-1/2" VBR	10M
		Upper 3-1/2 - 5-1/2" VBR	
ALL	0" - 13-5/8"	Annular	5M
Open-hole	6-3/4"	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.

HWDP = Heavy Weight Drill Pipe

MWD = Measurement While Drilling

#### **B.** Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The pressure at which control is swapped from the annular to another compatible ram will occur when the anticipated pressure is approaching or envisioned to exceed 70% of the 5M annular Rated Working Pressure (RWP) or 3500 PSI.

#### General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position).
- 5. Confirm shut-in
- 6. Notify tool pusher/company representative

- 7. Read and record the following:
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or expected to reach 70% of the annular RWP during kill operations, crew will reconfirm spacing and swap to the upper pipe ram

#### General Procedure While Tripping

- 1. Sound alarm (alert crew)
- 2. Stab full opening safety valve and close
- 3. Space out drill string
- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position)
- 5. Confirm shut-in
- 6. Notify tool pusher/company representative
- 7. Read and record the following
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan
  - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram

#### General Procedure While Running Casing

- 1. Sound alarm (alert crew)
- 2. Stab crossover and full opening safety valve and close
- 3. Space out string
- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position).
- 5. Confirm shut-in
- 6. Notify tool pusher/company representative
- 7. Read and record the following:
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan.
  - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

#### General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams or BSR. (The HCR and choke will already be in the closed position)
- 3. Confirm shut-in
- 4. Notify tool pusher/company representative

- 5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
- 6. Regroup and identify forward plan

#### General Procedures While Pulling BHA thru Stack

- 1. PRIOR to pulling last joint of drill pipe thru the stack.
  - a. Perform flow check, if flowing:
  - b. Sound alarm (alert crew)
  - c. Stab full opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper pipe ram
  - e. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
  - f. Confirm shut-in
  - g. Notify tool pusher/company representative
  - h. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
    - iv. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. Stab crossover and full opening safety valve and close
  - c. Space out drill string with upset just beneath the compatible pipe ram
  - d. Shut-in using compatible pipe ram. (The HCR and choke will already be in the closed position.)
  - e. Confirm shut-in
  - f. Notify tool pusher/company representative
  - g. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
    - iv. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario
  - c. If impossible to pick up high enough to pull the string clear of the stack
  - d. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
  - e. Space out drill string with tool joint just beneath the upper pipe ram

- f. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
- g. Confirm shut-in
- h. Notify tool pusher/company representative
- i. Read and record the following:
  - i. SIDPP and SICP
  - ii. Pit gain
  - iii. Time
- j. Regroup and identify forward plan