Form 3160-5	UNITED STATES		1	FORM	APPROVED
	PARTMENT OF THE IN UREAU OF LAND MANAG			OMB N Expires: Ja	O. 1004-0137 anuary 31, 2018
)	NOTICES AND REPOR			5. Lease Serial No. NMNM45236	
Do not use thi abandoned we	s form for proposals to a II. Use form 3160-3 (APD)	Irill or to re-enter an) for such proposals.		6. If Indian, Allottee of	r Tribe Name
SUBMIT IN	TRIPLICATE - Other instr	uctions on page 2		7. If Unit or CA/Agree	ement, Name and/or No.
1. Type of Well				8. Well Name and No. STERLING SILVE	ER MDP1 33-4 FD C 177H
2. Name of Operator OXY USA INCORPORATED	Contact: S	ARAH E CHAPMAN APMAN@OXY.COM		9. API Well No. 30-015-46047-0	
3a. Address	T	3b. Phone No. (include area code	r)	10. Field and Pool or	Exploratory Area
5 GREENWAY PLAZA SUITE HOUSTON, TX 77046-0521 4. Location of Well (Footage, Sec., 7		Ph: 713-350-4997		PURPLE SAGE	-WOLFCAMP (GAS)
Sec 33 T23S R31E NENW 69				EDDY COUNTY	
32.267994 N Lat, 103.783188					, 1977
12. CHECK THE AI	PPROPRIATE BOX(ES) 1	TO INDICATE NATURE C	OF NOTICE,	REPORT, OR OTH	IER DATA
TYPE OF SUBMISSION	· .	TYPE O	F ACTION		. · ·
Notice of Intent	C Acidize	Deepen	Product	ion (Start/Resume)	UWater Shut-Off
- · .	Alter Casing	Hydraulic Fracturing	🗖 Reclam	ation	Well Integrity
Subsequent Report	Casing Repair	New Construction	🗖 Recomp	olete	🛛 Other Change to Original A
Final Abandonment Notice	Change Plans	Plug and Abandon		arily Abandon	PD
	Convert to Injection	Plug Back	U Water I	Disposal	
Attach the Bond under which the wor following completion of the involved	rk will be performed or provide the operations. If the operation results operation is a second secon	tive subsurface locations and meas he Bond No. on file with BLM/BL alts in a multiple completion or rec	ured and true ve A. Required sul ompletion in a r	osequent reports must be new interval, a Form 316	nent markers and zones. filed within 30 days i0-4 must be filed once
Attach the Bond under which the wor following completion of the involved testing has been completed. Final At determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design	rk will be performed or provide to operations. If the operation resu- pandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL	tive subsurface locations and meas he Bond No. on file with BLM/BI ults in a multiple completion or rec d only after all requirements, inclu	ured and true ve A. Required su completion in a ding reclamatio	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a	ent markers and zones. filed within 30 days i0-4 must be filed once
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to	rk will be performed or provide to operations. If the operation resu- pandonment Notices must be file inal inspection. quests to amend the approv- be 2050' FEL 4-string)	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll	ured and true ve A. Required sul completion in a i ding reclamatio owing chang	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es:	nent markers and zones. filed within 30 days i0-4 must be filed once
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen	rk will be performed or provide to operations. If the operation resu- pandonment Notices must be file inal inspection. quests to amend the approv- be 2050' FEL 4-string)	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll Carlsba	ured and true ve A. Required sult completion in a b ding reclamation owing chang	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: G J UL D J UL	ent markers and zones. filed within 30 days 0-4 must be filed once and the operator has
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen	rk will be performed or provide to operations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use.	ive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll Carlsba OC	ured and true ve A. Required sul completion in a i ding reclamation owing chang d Fiel D Art	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: d Office esia	ECEMED 2 3 2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you.	rk will be performed or provide to operations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use. tation for your use.	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll ved APD because of the foll Carlsba OC 68003 verified by the BLM We INCORPORATED, sent to the	ured and true ve A. Required sul- ompletion in a b- ding reclamation owing chang d Fiel D Art ell Information a Carlsbad	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: d Offfice esia System	ECEMED 2 3 2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you.	rk will be performed or provide to operations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use. tation for your use.	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll ved APD because of the foll 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ of	ured and true ve A. Required sul- ompletion in a b- ding reclamation owing chang d Fiel D Art ell Information a Carlsbad	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: d Office esia System (19PP2423SE)	ECEMED 2 3 2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you. 14. I hereby certify that the foregoing is Name (<i>Printed/Typed</i>) SARAH E	rk will be performed or provide to operations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the appro- be 2050' FEL 4-string) tation for your use. tation for your use. Electronic Submission #4 For OXY USA mmitted to AFMSS for procest CHAPMAN	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll ved APD because of the foll Carlsba OC 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ of Title REGU	ured and true ve A. Required sul ompletion in a i ding reclamatio owing chang d Fiel D Art ell Information carlsbad on 06/13/2019 LATORY SP	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: d Office esia System (19PP2423SE)	ECEMED 2 3 2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you.	rk will be performed or provide t loperations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the appro- be 2050' FEL 4-string) tation for your use. true and correct. Electronic Submission #4 For OXY USA mitted to AFMSS for proces CHAPMAN	tive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll ved APD because of the foll 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ of	ured and true ve A. Required sul completion in a i ding reclamation owing chang d Fiel D Art all Information a Carlsbad on 06/13/2019 LATORY SP 2019	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es: d Office esia USTRICTI System (19PP2423SE) ECIALIST	ECEMED 2 3 2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al- determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you. 14. I hereby certify that the foregoing is Con Name (<i>Printed/Typed</i>) SARAH E Signature (Electronic S	rk will be performed or provide t loperations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use. tation for your use. telectronic Submission #4 For OXY USA mitted to AFMSS for procest CHAPMAN Submission)	ive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll wed APD because of the foll Carlsba 0 0 68003 verified by the BLM We 1NCORPORATED, sent to the ssing by PRISCILLA PEREZ of Title REGU Date 06/06/7	ured and true ve A. Required sul completion in a i ding reclamation owing chang d Fiel D Art all Information a Carlsbad on 06/13/2019 LATORY SP 2019 OFFICE U	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es:	ent markers and zones. filed within 30 days 0-4 must be filed once and the operator has ECEIVED 2 3 2019 MARTESIAO.C.D.
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al- determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you. 14. I hereby certify that the foregoing is Con Name (<i>Printed/Typed</i>) SARAH E Signature (Electronic S <u>Approved By_NDUNGU KAMAU_</u> Conditions of approval, if any, are attache	rk will be performed or provide to loperations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use. tation for your use. Electronic Submission #4 For OXY USA mitted to AFMSS for procest CHAPMAN Submission) THIS SPACE FO	ive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll Carlsba OC 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ Title REGU Date 06/06// R FEDERAL OR STATE	ured and true ve A. Required sul completion in a i ding reclamation owing chang d Fiel D Art all Information a Carlsbad on 06/13/2019 LATORY SP 2019 OFFICE U	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es:	ent markers and zones. filed within 30 days 0-4 must be filed once and the operator has ECEIVED 2 3 2019 MARTESIAO.C.D.
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al- determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you. 14. I hereby certify that the foregoing is Name (<i>Printed/Typed</i>) SARAH E Signature (Electronic S Approved By_NDUNGU KAMAU_ Conditions of approval, if any, are attache certify that the applicant holds legal or eq which would entitle the applicant to condu	rk will be performed or provide t loperations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the appro- be 2050' FEL 4-string) tation for your use. Electronic Submission #4 For OXY USA mmitted to AFMSS for proces CHAPMAN Submission) THIS SPACE FO	ive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll Carlsba OC 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ of Title REGU Date 06/06/7 R FEDERAL OR STATE TitlePETROL not warrant or subject lease Office Carlsba	ured and true ve A. Required sul ompletion in a i ding reclamation owing chang d Fiel D Art ell Information a Carlsbad on 06/13/2019 LATORY SP 2019 OFFICE U EUM ENGIN ad	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es:	ent markers and zones. filed within 30 days 0-4 must be filed once and the operator has ECEMED ARTESIAO.C.D. Date 07/09/2019
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al- determined that the site is ready for f OXY USA Inc. respectfully rec 1. BHL is moving 150' east, to 2. Landing zone change 3. Cement Design (3-string to 4. Casing Design 5. Well Control Update Please find updated documen Thank you. 14. I hereby certify that the foregoing is Con Name (<i>Printed/Typed</i>) SARAH E Signature (Electronic S <u>Approved By_NDUNGU KAMAU_</u> Conditions of approval, if any, are attache certify that the applicant holds legal or equ	rk will be performed or provide t loperations. If the operation resu- bandonment Notices must be filed inal inspection. quests to amend the approv- be 2050' FEL 4-string) tation for your use. tation for your use. Electronic Submission #4 For OXY USA mitted to AFMSS for proces CHAPMAN Submission) THIS SPACE FO	ive subsurface locations and meas he Bond No. on file with BLM/BL ults in a multiple completion or rec d only after all requirements, inclu ved APD because of the foll Carlsba OC 68003 verified by the BLM We INCORPORATED, sent to the ssing by PRISCILLA PEREZ Title REGU Date 06/06// R FEDERAL OR STATE 	ured and true ve A. Required sul completion in a 1 ding reclamation owing chang d Fiel D Art ell Information a Carlsbad on 06/13/2019 LATORY SP 2019 OFFICE U EUM ENGIN	rtical depths of all pertir sequent reports must be new interval, a Form 316 n, have been completed a es:	ent markers and zones. filed within 30 days 0-4 must be filed once and the operator has ECEMED ARTESIAO.C.D. Date 07/09/2019

¢φ

Revisions to Operator-Submitted EC Data for Sundry Notice #468003

	Operator Submitted		BLM Revised (
Sundry Type:	APDCH NOI		APDCH NOI
Lease:	NMNM45236		NMNM45236
Agreement:		· · ·	
Operator:	OXY USA INC. P.O. BOX 4294 HOUSTON, TX 77210 Ph: 713-350-4997		OXY USA INCORP 5 GREENWAY PLA HOUSTON, TX 770 Ph: 713.350.4816
Admin Contact:	SARAH E CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH_CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997		SARAH E CHAPMA REGULATORY SPI E-Mail: SARAH_CH 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		SARAH E CHAPMA REGULATORY SPI E-Mail: SARAH_CH Cell: 281-642-5503 Ph: 713-350-4997
Location: State: County:	NM EDDY COUNTY		NM EDDY
Field/Pool:	PURPLE SAGE WOLFCAMP		PURPLE SAGE-WO
Well/Facility:	STERLING SILVER MDP1 33-4 FEDE 177H Sec 33 T23S R31E NWNE 69FNL 2504FWL 32.267992 N Lat, 103.783189 W Lon		STERLING SILVER Sec 33 T23S R31E 32.267994 N Lat, 10

(AFMSS)

PORATED .AZA SUITE 110 7046-0521

MAN PECIALIST CHAPMAN@OXY.COM 13

MAN PECIALIST CHAPMAN@OXY.COM 13

VOLFCAMP (GAS)

ER MDP1 33-4 FD C 177H E NENW 69FNL 2504FWL 103.783188 W Lon

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INCORPORATED
LEASE NO.:	NMNM045236
WELL NAME & NO.:	177H:STERLING SILVER MDP1 33-4 FDC
SURFACE HOLE FOOTAGE:	69'/N & 2504'/W
BOTTOM HOLE FOOTAGE	20'/S & 2504'/W
LOCATION:	T-23S, R-31E, S33. NMPM
COUNTY:	EDDY, NM

COA

H2S	⊂ Yes	· No	
Potash	None	Secretary.	• R-111-P
Cave/Karst Potential	• Low	^C Medium	∩ High
Variance	∩ None	• Flex Hose	Other
Wellhead	Conventional	⁽ Multibowl	• Both
Other	^[7] 4 String Area	Capitan Reef	└─ WIPP
Other	Fluid Filled	Cement Squeeze	F 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 510 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 <u>24 hours in the Potash Area</u> 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 4301 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.

2nd 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^{nd} 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. <u>Operator must run</u> a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM. Excess calculates to 7% - 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 2nd 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:

 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. <u>When the Communitization Agreement number is known, it shall also be</u> 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 County Call 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 2nd 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.
- 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 <u>24</u> hours. WOC time will be recorded in the driller's log.
- <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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.
- c. 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

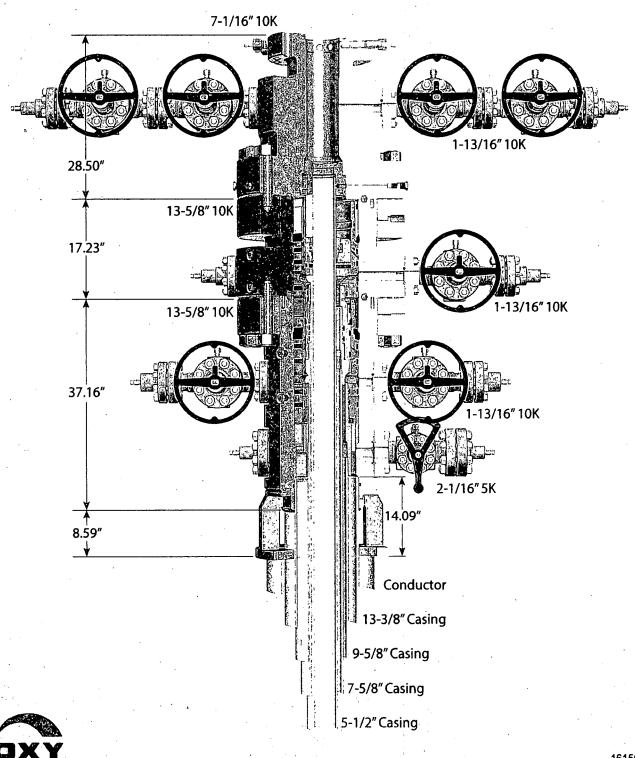
All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location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

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

NMK792019



13-5/8" 10K MN-DS Wellhead Four String



1615045 NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

PERFORMANCE DATA

5.500 in

TMK UP TORQ[™] DQW Technical Data Sheet

Tubular Parameters

Size	5.500	in
Nominal Weight	20.00	lbs/ft
Grade	P110 CY	
PE Weight	19.81	lbs/ft
Wall Thickness	0.361	in
Nominal ID	4.778	in
Drift Diameter	4.653	lin
Nom. Pipe Body Area	5.828	in²
	-	

Connection Parameters

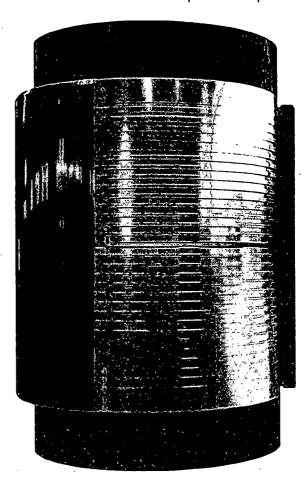
Connection OD	6.050	in
Connection ID	4.778	in .
Make-Up Loss	4.324	in
Critical Section Area	5.828	in²
Tension Efficiency	[•] 100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi
Uniaxial Bending	92	°/ 100 ft

Make-Up Torques

Min. Make-Up Torque	14,000	ft-lbs
Opt: Make-Up Torque	16,000	ft-Ibs
Max. Make-Up Torque	18,000	ft-lbs
Operating Torque	36,800	ft-lbs
Yield Torque	• 46,000	ft-lbs

Minimum Yield 110,000 Minimum Tensile 125,000

Yield Load	641,000	lbs
Tensile Load	729,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi



Printed on: March-05-2019

NOTE:

The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.



20.00 lbs/ft

P110 CY

psi

psi

PERFORMANCE DATA

TMK UP DQX Technical Data Sheet

Tubular Parameters

Size	5.500	in	
Nominal Weight	20.00	lbs/ft	
Grade	P-110		
PE Weight	19.81	lbs/ft	
Wall Thickness	0.361	in	
Nominal ID	4.778	in	
Drift Diameter	4.653	. in	
Nom. Pipe Body Area	5.828	in²	

Connection Parameters

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

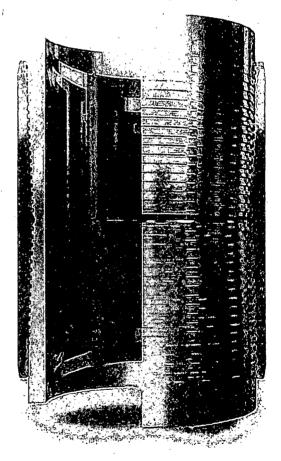
Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs

Printed on: July-29-2014

NOTE:

The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.

Minimum Yield	110,000	psi
Minimum Tensile	125,000	psi
Yield Load	641,000	lbs
Tensile Load	729,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi





5.500 in

20.00 lbs/ft

P-110

TECHNICAL DATA SHEET TMK UP DQX 5.5 X 20 P110

TUBULAR PARAMETERS		PIPE BODY PROPERTIES
Nominal OD, (inch)	5.500	PE Weight, (ibs/ft)
Wall Thickness, (inch)	0.361	Nominal Weight, (lbs/ft)
Pipe Grade	P110	Nominal ID, (inch)
Coupling	Regular	Drift Diameter, (inch)
Coupling Grade	P110	Nominal Pipe Body Area, (sq inch)
Drift	Standard	Yield Strength in Tension, (klbs)
CONNECTION PARAMETERS		Min. Internal Yield Pressure, (psi) Collapse Pressure, (psi)
Connection OD (inch)	6.05	
Connection ID, (inch)	4.778	internal Pressure
Make-Up Loss, (inch)	4.122	
Connection Critical Area, (sq inch)	5.828	
Yield Strength in Tension, (klbs)	641	
Yeld Strength in Compression, (klbs)	641	
Tension Efficiency	100%	
Compression Efficiency	100%	

12 640

11 110

91.7

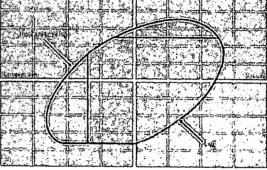
MAKE-UP	TORQUES

Collapse Pressure, (psi)

Uniaxial Bending (deg/100ft)

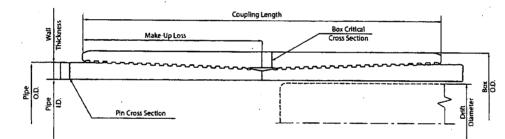
Min. Internal Yield Pressure, (psi)

Yield Torque, (ft-lb)	20 600
Minimum Make-Up Torque, (ft-lb)	11 600
Optimum Make-Up Torque, (ft-lb)	12 900
Maximum Make-Up Torque, (ft-lb)	14 100



Fat.

19.81 20.00 4.778 4.653 5.828 641 12 640 11 110



NOTE: The content of this Technical Data Sheet is for general Information only and does not guerantee performance or incly litness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. This information superscine all poor versions for this connection. Information that is primate or downloaded is no longer controlled by TMK and might not be the first information. Argon using the information fore so at their own nick Town in the first information please contact; PAO "TMK" Technical Sales in Russia (Tel +7 (459) 775-76-00, Email: techsales@unk.group.com) and TMK iPSOD in Nextli America (Tel +1 (281)949-1044, Email: techsales@unk.jpsco.com)

Print date. 12/07/2017 18:09

PERFORMANCE DATA

5.500 in

in

lbs/ft

lbs/ft

in

in

lin

in²

4.778

4.653

5.828

TMK UP SF TORQ™

Nominal ID

Drift Diameter

Nom. Pipe Body Area

Technical Data SheetTubular ParametersSize5.500Nominal Weight20.00GradeP110 HCPE Weight19.81Wall Thickness0.361

Connection Parameters		
Connection OD	5.777	in
Connection ID	4.734	in
Make-Up Loss	5.823	in
Critical Section Area	5.875	in²
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

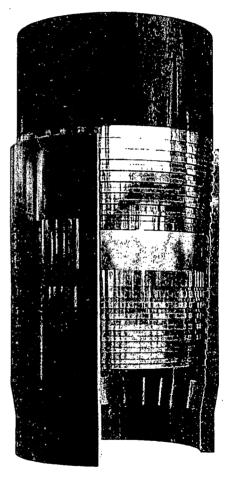
Make-Up Torques

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

Minimum Yield	110,000	psi
Minimum Tensile	125,000	psi
Yield Load	-641,000	lbs
Tensile Load	728,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	12,780	psi

20.00 lbs/ft

P110 HC



Printed on: February-22-2018

NOTE:

The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.



1

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)			
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)			
Pipe Grade	L80 HC	Nominal ID, (inch)			
Drift	Standard	Drift Diameter, (inch)			
		Nominal Pipe Body Area, (sq inch)			
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs)			
Connection OD (inch)	7.63	Min. Internal Yield Pressure, (psi)			
Connection ID, (inch)	6.975	Collapse Pressure, (psi)			
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%	100% NPI 5C3 / ISC			
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

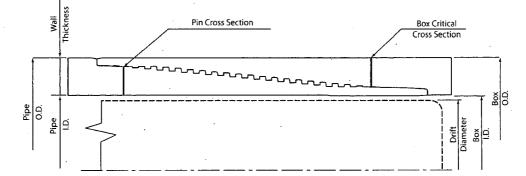
Yield Torque, (ft-lb)	22 200
Minimum Make-Up Torque, (ft-lb)	12 500
Optimum Make-Up Torque, (ft-lb)	13 900
Maximum Make-Up Torque, (ft-lb)	15 300

p			L			\square	<u> </u>
1009	API 5C3/150					[···}]	a da angar Nganga
	\Box			28.2			
Comprossie	\Box			77			Terrion
					2.0		
	100		1	P. IN C		\mathbb{Z}	
					\mathbb{X}		
	$[\searrow]$. 7				VME	11
			1	sen in			

25.56 26.40 6.969 6.844 7.519 601 6 020 3 910

Contection
 Page Body

External Pressure



NOTE: The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. This information supersede all prior versions for this connection, information that is primted or downhaded is no longer controlled by Tivik, and might not be the latest (technical Information even using the information and operation does so at their own risk. To even it that you have the latest (technical Information and the second their own risk. To service the latest (technical Information supersed) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and Tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik (PSCO in North Amorica (Tel +1 (495) 775-76-00, Email technolos@tink-group com) and tivik

Print date: 07/10/2018 20:11

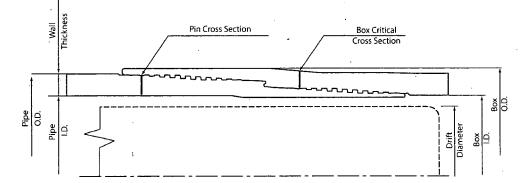
TECHNICAL DATA SHEET TMK UP SF 7.625 X 26.4 L80 HC

TUBULAR PARAMETERS	
Nominal OD, (inch)	7.625
Wall Thickness, (inch) .	0.328
Pipe Grade	L80 HC
Drift	Standard
CONNECTION PARAMETERS	
Connection OD (inch)	7.79
Connection ID, (inch)	6.938
Make-Up Loss, (inch)	6.029
Connection Critical Area, (sq inch)	5.948
Yield Strength in Tension, (klbs)	533
Yeld Strength in Compression, (klbs)	533
Tension Efficiency	. 89%
Compression Efficiency	89%
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	. 3910
Uniaxial Bending (deg/100ft)	42.7

PIPE BODY PROPERTIES	
PE Weight, (Ibs/ft)	25.56
Nominal Weight, (lbs/ft)	26.40
Nominal ID, (inch)	6.969
Drift Diameter, (inch)	6.844
Nominal Pipe Body Area, (sq inch)	7.519
Yield Strength in Tension, (klbs)	601
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910

			Internal	Pressure			
5 T S -					a da a		1. N. M.
						\sum	1.5
1009	API-5C37150					[]	57 -
		\square	2			$\lambda > 1$	
Compressio	$\Box Z$		1. 1. 3 L. 1. 4	300		ELL	Tension
	[/]			10		17	
				1.0			$\mathcal{E}(\mathcal{A})$
					X		
						WAR G	
		а. 1			2		

External Pressure	
Criticitien Freshore	 Ploy line



22 600 15 000

16 500

18 200

NOTE: The sontent of this Technical Data Sheet is for general information only and does not guarantee performance or imph, I tness for a particular purpose, which only a competent dolling professional can determine considering the spacific installation and operator parameters. This information supersed-all provides reasons for this connection. Information and operator parameters are included as no longer controlled by TAK and high not be the latest information and operator lates are longer controlled by TAK and high not be the latest information and operator allow bases contact PAO. TMIC Technical Sales in Russia (TeL 47, 1495) 775-76-00. Email techsales@tmi+igsco.com)

Print date: 07/10/2018 20:00

MAKE-UP TORQUES Yield Torque, (ft-lb)

Minimum Make-Up Torque, (ft-lb) Optimum Make-Up Torque, (ft-lb)

Maximum Make-Up Torque, (ft-lb)

640

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

98236 Wolfcamp.

AMENDED REPORT

		<u>и</u>	ELL LOCATI	ON AND A	4CR	EAGE D.	EDICA TIO	NPLAT		Sec	33
30-0		I Number	Pool 962	Code 2 O		b	liakola G	Pool Name		C	
	rty Code		100		perty	Name	inple Sag	ge wor	amp		C 4
322		S	TERLING SIL	VER MDP	1″	'33–4" I	FEDERAL	СОМ			77H
	RID No.			Op	erator	Name				Elevation	
	009	4		OXY U	USA	INC.				33	886.5'·
				Surface	e Lo	cation					
UL or lot no.	Section	Township	Range	La	ot idn	Feet from the	North/South line	Feet from the	EastWe	st line	County
С	33	23 SOUTH	31 EAST, N.	М. Р. М.		69'	NORTH	2504'	WES	T ·	EDDY
			Bottom Hol	le Location	lfL	Different F	From Surfac	e	•••••••	ł.	·
UL or lot no.	Section	Township	Range	Lo	ot Ida	Feet from the	North/South line	Feet from the	EastWe	st line	County:
0	4	24 SOUTH	31 EAST, N.I	М. Р. М.		20'	SOUTH	2050'	EAS	T	EDDY
Dedicated	Across	loint or Infill	Consolidation Code	Order Mo	· · ·			L			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

63. 100. 50.	
32 33 2504 2050 33 34	OPERATOR CERTIFICATION
SURFACE LOCATION NEW MEXICO EAST	I harmly carify that the information constitued herein is true and
1 NAD 1983 / / V / I	complete to the base of my knowledge and belief, and that this
$$ $x=711378.89 05 FT$ $$ $$ $$ $$ $$ $$ $$ $$ $$	organization either owns a working interest or unleased mineral
LONG.: W 103.7831891	interest in the kend including the proposed bottom hale location or
<u>GRID AZ = 88°12'03"</u>	has a right to drill this well at this location persons to a contract
	with an owner of such a mberral or working interest, or to a
NEW MEXICO EAST	volutary pooling agreement or a computery pooling order
MAD 1983 Y=461687.45 US FT X=712105.10 US FT V= V 2000 FT	beretafore entrue by the division
LAT.: N 32.2680452 LONG.: W 103.7808392	Jugan (Junhava 6/2/19
	Signature Paul
NEW MEXICO EAST	Jurdh Chaman
Y=461637.45 US FT X=712105.33 US FT UT N 30 26700.79	Printed Name
LONG.: W 103.7808393	Swigh-applican @DXY-LOM
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	E-date Address
	·····
	SURVEYOR CERTIFICATION
	I hereby certify the Be well loonly shown on this
	plat was flotted from the adapt of actual surveys made by more mater my supervision and that the
	same is and correct to the best of my belief.
LAST TAKE POINT NEW WEXIC OLAST NEW UB32	[목] (15079)) 및
NEW MEXICO EAST	01570BER 23 20185
	Date of Survey Signature and Stopf Scientific
LAT.: N 32.2393994 LONG.: W 103.7808586	Signature and Stoppe Professional Surveyors SIONAL
	Protessioned Survey and Oron .
BOTTOM HOLE LOCATION	
NEW MEXICO EAST	ET ARALI
Y=451186.35 US FT X=712153.12 US FT	Arres / loc 5/14/2019
LAT.: N 32.2391795 LONG.: W 103.7808587	Certificate Number 15079
5 4 330 -8 2050 4 3	. WOJ 181023WL-a (Rev. A) (KA)

for 10-25-19

	,
Property Name:	Well Number
Sterling Silver HDP1 33-4 Fed Com	HLLI
	Property Name: Starling Silver HDP1 33-4 Fed Com

Kick Off Point (KOP)

ul B	Section 33	Township 235	Range 316	Lot	Feet 50	From N/S NORTH	Feet 2050	From E/W Cast	County EDJ)Y	
Latitu	de			• ·	Longitude			<u> </u>	NAD	
32.	2681	1452			-103.7	808392	·····		JAI) 83	

First Take Point (FTP)

UL ß.	Section 33	Township	Range 31E	Lot	Feet	From N/S NORTH	Feet 2.050	From E/W CQT	County EDD	
Latitu	de				Longitude				NAD	
32	. 24	19078			103.780	8393		. •	NADES	

Last Take Point (LTP)

UL O	Section 4	Township 245	Range 31É	Lot	Feet 330	From N/S South	Feet 2050	From E/W	County EDBM	· · · · · · · · · · · · · · · · · · ·
Latitu	1				Longitu	de			NAD	
32.	32.2313994					. 78085	168	NAD83		

Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		• •
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983) STERLING SILVER MDP1 33-4 FED COM STERLING SILVER MDP1 33-4 FED COM 177H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

22 May, 2019

Database:		The second secon	The state of the s				
	HOPSPP	an an ann an tha an tha tha an tha Tha an tha an t	anagaran karanan karanan		linate Reference		SILVER MDP1 33-4 FED COM
						177H	1
Company: Project:	1	ERING DESIGNS	LANS (NAD 1983	TVD Referen	The second second second second second second second	RKB=26.5' @ 3	
Site:	45-68-4	IG SILVER MDP1	,) MD Reference	WANNER STREET	RKB=26.5' @ 3- Grid	413.00π β
Well:	221		33-4 FED COM 1	and the second sec	ulation Method:	Minimum Curva	ture
Wellbore:	Wellbore	#1		Share Care and Share			a Li
Design:	Permitting	g Plan	******	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A CARLEN CONTRACTOR		ן
Project		DIRECTIONAL PL	ANS (NAD 1983)			anden sie Detail an sie die Stelland auf Berlinke ander die	1. 11. 5 2 5 10 1 4 10 1 10 1 10 10 10 10 10 10 10 10 10 10
and a second				THE ACCOUNT OF A DESCRIPTION			Christian and a state with the states.
Map System:	US State Pl			System Datur	n:	Mean Sea Level	
Geo Datum:		ican Datum 1983 5 Eastern Zone				Lising goodotic co	alo factor
Map Zone:		Eastern Zone				Using geodetic sc	
Site		G SILVER MDP1	33-4 FED COM			and the set of the set	$(1,1) \in [0,1] \rightarrow (1,2) \rightarrow (1,2) \rightarrow (1,1) \rightarrow (1,1) \rightarrow (1,1) \rightarrow (1,1) \rightarrow (1,2) \rightarrow (1,2$
Site Position:			Northing:	461,634	.30 usft Latitu	ie:	32° 16' 4.557918 N
From:	Мар		Easting:		0.04 usft Longi		103° 47' 18.930890 W
Position Uncertain	•	50.00 ft	Slot Radius:		•	onvergence:	0.29 °
			300004				
Well		SILVER MDP1	33-4 FED COM 17	7H	MALLED WILLIAM STREET	ninger states and the states	אין אין אין אאראנעריינע איניין איניין אינייאערערער אין
Well Position	+N/-S	30.34 ft		4	61,664.64 usft	Latitude:	32° 16' 4.773856 N
	+E/-W	1,669.95 ft	Easting:	. 7	11,378.89 usft	Longitude:	103° 46' 59.480648 W
Position Uncertain	ity	2.00 ft	Wellhead El	evation:	0.00 ft	Ground Level:	3,386.50 ft
Wellbore	Wellbore	#1	8 746 M 480 M 80 4 34 M 40 40 40 40 40 40 40 40 40 40 40 40 40	RADIO COLUMNIC DI MANIFESTI DI MANDI D	CAR, N. F. JANI, KLANDARDANI, MANAGAMI,	n 7 - 2 Wind See Marine L. M 20 - 20 - 20 Marine Marine Carl and a Carl Carl B.	LIJANNYLLEFAR (*1) 1972-1120-1147-11720-11420-1142-1142-1142-1142-1142-1142-1
	Switt Commission Commission	ar i Prima more i succession		***************************************	NUMERIC DESIGNATION OF THE	BARREN PROFESSION AND AND AND AND AND AND AND AND AND AN	nan kantan mulanka pina put eta kaina dar dan bar bari.
Magnetics	Mödel	Name	Sample Date	Declinatio	n ganata	Dip Angle	Field Strength
New Store			PL CHERK KINS	5 700			(nT)
n Allendar ordelis Allendar II danse est view	laiphe las- siddinei C.F	HDGM	5/22/2019	and and from London and an entry to share of Post and the second second second	6.80	59.97	47,954
	4						
Design	🔮 Permitting	I TO BE A DESCRIPTION OF A DESCRIPTION	10 14	المالية فترك 12.5 في المال بالشارك المراجد المراجع المالية الم			NORCELES REPERSONNEL STATE PLUTANE - LINCA - LINCA
		Plan		International and the second		anda anti-anti-ana ana amana an Antipangkan ang ang ang ang ang ang ang ang ang a	andrene and an and an
Audit Notes:				1994 - LANDERSKI, BUZ BUZZA BUZ 1995 - LANDERSKAMARSKI (* 1977)	ana ana ana sa	anda makangkatan daran daran sana sana sana sana sana sana sana	andrean ar an
Audit Notes: Version:			Phase:	PROTOTYPE	Tie On De	2016 - 2016 -	
		Depth F	rom(TVD)	A+N/-S	%	Dire	ction
Version:		Depth F	الزائلة الارتحاد موردا إيادان المتقوم والمراجع والمتعرف	-		Dire	
Version:		Depth'F	rom(TVD)	A+N/-S	%	Dire All and a second	ction
Version: 'Vertical Section:		Depth'F	rom (TVD) (ft)	21	Υ₀ +E/-₩/ 	Dire All and a second	ction Des
Version:		Depth'F	rom (TVD) (ft)	4 +N/-S (ft) 0.00	+ E/:W (ft) 0.00	Dire 17	ction Des
Version: Vertical Section: Plan Sections Measured		Depthi f (rom (TVD) (ft)).00 .cal	4 +N/-S (ft) 0.00	+E/:W (ft) 0.00 Dogleg Bu	Dire 17 Ild	iction ()
Version: Vertical Section: Plan Sections Measured Depth Incl	lination . A	Depthi f (vert zimuth, Dệr	rom (TVD) (ft)).00 ical (t) +N/-Si	(ft) 0.00 +E/-₩	+E/:W (ft) 0.00 Dogleg Rate	Dire 17 Ild Rurn Rate	iction Des 5.77 TFO
Version: Vertical Section: Plan Sections Measured Depth Incl	linátlóň Á	Depthi f (rom (TVD) (ft)).00 ical (ft) +N/-S	4 +N/-S (ft) 0.00	+E/:W (ft) 0.00 Dogleg Rate	Dire 17 Ild	iction ()
Version: Vertical Section: Plan Sections Measured Depth Incl		Depthi f (vert zimuth, Dệr	rom (TVD) (ft)).00 ical (t) +N/-Si	(ft) 0.00 +E/-₩ (ft)	+E/:W (ft) 0.00 Dogleg Rate	17 17 18 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10	iction Des 5.77 TFO
Version: Vertical Section: Plan Sections Measured Depth Incl	(;))((;))((;);(;);(;);(;);(;);(;);(;);	Depth f (vert zimuth Der (1) 0.00	rom (TVD) (ft)).00 ical (ft) +N/S (ft)	+E/-W (ft) 0.00 +E/-W (ft) 00 0.00 00 0.00	+E/:W (ft) 0.00 Dogleg Rate /100ft) 0.00 0.00 0.00	17 17 18 18 18 17 17 17 17 17 17 17 17 17 17 17 17 17	ction () 5.77 TFO () Target
Version: Vertical Section: Plan Sections Measured Depth Incl (ft) 0.00	0.00 0.00 0.00 10.00	Depth f (vert zimuth Der () 0.00 0.00 5,0 49.73 5,5	rom (TVD) (ft) 0.00 ical: ith +N/-S; 0.00 0.0 0.00 0.0 075.00 0.0 572.37 28.1	+ E/-W (ft) 0.00 + E/-W (ft) 00 0.00 00 0.00 12 33.19	+E/:W (ft) 0.00 Dogleg Rate (100ft) 0.00 0.00 0.00 2.00	Id Turning Id Turning Id Turning (7.100ft) 0.00 0.00 0.00 0.00 0.00 2.00 0.00	Ction 5.77 TFO (i) Target 0.00 0.00 49.73
Version: Vertical Section: Plan Sections Measured Depth Incl (ft) 0.00 5,075.00 5,574.90 10,330.12	()) 0.00 0.00 10.00 10.00	Depthi f (vert zimuth 0.00 0.00 0.00 5,0 49.73 5,5 49.73	rom (TVD) (ft) 0.00 ical 0.01 (ft) (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	+E/-W/ (ft) 0.00 +E/-W/ (ft) 00 0.00 00 0.00 12 33.19 80 663.08	+E/:W (ft) 0.00 Dogleg Rate (100ft) 0.00 0.00 2.00 0.00	ild Turn re Rate ort) (7/100ft) 0.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00	Ction 1 5.77 TFO (i) Target 0.00 0.00 49.73 0.00
Version: Vertical Section: Plan Sections Measured Depth. Incl (ff) 0.00 5,075.00 5,574.90 10,330.12 11,235.55	()) 0.00 0.00 10.00 10.00 10.00 10.00	Depthi f (vert zimuth Der () 0.00 0.00 0.00 5,0 49.73 5,5 49.73 10,2 179.74 11,1	rom (TVD) (ft) 0.00 ical 101 0.00 (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	4 +N/-S (ft) 0.00 +E/-W/ (ft) 00 0.00 00 0.00 12 33.19 80 663.08 77 723.92	+E/:W (ft) 0.00 Dogleg Rate (100ft) 0.00 0.00 2.00 0.00 2.00	17 ild: Turn te Rate jort) (7/100ft) 0.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Ction 1 5.77 TFO () Target 0.00 0.00 49.73 0.00 154.66
Version: Vertical Section: Plan Sections Measured Depth Incl (ft) 0.00 5,075.00 5,574.90 10,330.12	()) 0.00 0.00 10.00 10.00	Depth f (vert zimuth 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	rom (TVD) (ft) 0.00 ical 0.01 (ft) (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	+E/-W (ft) 0.00 +E/-W (ft) 00 0.00 00 0.00 12 33.19 80 663.08 77 723.92 19 726.48	+E/:W (ft) 0.00 Dogleg Rate (100ft) 0.00 0.00 2.00 0.00	ild Turn re Rate ort) (7/100ft) 0.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00	Ction 5.77 TFO (i) Target 0.00 0.00 49.73 0.00

.

.

.

l

Database:	HOPSPP				o-ordinate Refere	nce (Well STERLING	SII VER MOP	1 33-4 FED COM
				Street Street			177H		130-TIED COM
Company:	ENGINEERING D	DESIGNS		TVD Re	ference:		RKB=26.5' @ 34	13.00ft	ŕ
Vist & White Will the Strate of the	PRD NM DIRECT			MD Ref	TRAINING N. SHARAGASASS		RKB=26.5' @ 34	13.00ft	
Price of the sea work was	STERLING SILVE			P	Reference:	and a sub-	Grid		le la
Well: San Star	STERLING SILVE	ER MDP1 33	-4 FED COM 177H	Survey	Calculation Meth	od:	Minimum Curvat	ure	4. R
	Mallhara #1								514
State The Third And And States and And	Vellbore #1			1					
Design:	Permitting Plan			- Elizabeth	Security adver		na falista da mila subdig paulit (h hundral manapalar p na falista da mila subdig paulit (h hundral manapalar p		
Planned Survey/ 1						81-1			
Depth		WALLAND THE	Vertical		In the second of the way the start the	tical tion		Build Rate	Turn Rate
(ft)	nclination / Az (°)	zimuth (fi)	NO. 23 TOTAL AND ADDRESS TO THE THE	l/-S∖ ft)	2 N	t)	17. M. M. THERE'S A. D. RUDA, MARCH	(100ft)	(°/100ft)
	THE REPORT OF	ST. ST. AND		<u>Charlensen</u>		(Angr	totemory at the first	ALL SALES	A to be the second
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00 200.00	0.00 0.00	0.00 0.00	100.00 200.00	0.00 0.00	0.00 0.00	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	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	0.00	800.00 900.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
	1								
1,000.00 1,100.00	0.00 0.00	0.00	1,000.00 1,100.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00
1,200.00	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 0.00
1,700.00 1,800.00	0.00 0.00	0.00 0.00	1,700.00 1,800.00	0.00 0.00	0.00 0.00	0.00 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
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	0.00 0.00	2,300.00 2,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
,									
2,500.00 2,600.00	0.00 0.00	0.00 0.00	2,500.00 2,600.00	0.00 0.00	0.00	0.00 0.00	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	0.00
3,200.00 3,300.00	0.00	0.00 · 0.00	3,200.00 3,300.00	0.00 0.00	0.00 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 3,900.00	0.00 0.00	0.00	3,800.00 3,900.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
							· 0.00	0.00	0.00
4,000.00 4,100.00	0.00 0.00	0.00 0.00	4,000.00 4,100.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00	0.00
4,100.00	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
4,800.00	0.00 0.00	0.00 0.00	4,800.00 4,900.00	0.00 0.00	0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00
4,900.00									
5,000.00 5,075.00	0.00 0.00	0.00 0.00	5,000.00 5,075.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
L0,075.00	0.00	0.00	0,070.00	0.00	0.00	0.00	0.00		

COMPASS 5000.1 Build 74.

Company: ENGINEERING DESIGNS TVD/Reference: 177H Project: PRD NM DIRECTIONAL PLANS (NAD 1983) MD Reference: RKB=26.5'@ 3413.00ft Site: STERLING SILVER MDP1 33-4 FED COM North Reference: Grid Well: STERLING SILVER MDP1 33-4 FED COM 177H Survey Calculation Method Minimum Curvature					Planning r	(opon				
Cympery Protection ENGLERING CERICAS STERLING SILVER MOP1 33 4 FED COM STERLING SILVER MOP1 34 FED COM STERLING SILVER MOP1	Database:	HOPSPP	STRAFTS 24	347776023668578	Local/C	o-ordinate/R	eference:	Well STERLING		
Property Weil: Weil: Weil: Weil: Weil: Weil: Permitting Pan Inter-26.5 (§) 413.00t Stream, Chr. 1000 (197) (197) Inter-26.5 (§) 413.00t Stream, Chr. 1000 (197) (197) <thinter-26.5 (§)="" 413.00t<br="">Stream, Chr. 1000 (197) (197)</thinter-26.5>	Company		DESIGNS			and the second	4		412 00#	10 A
Site STRELING SILVER MOP1 33 4 FED COM Nenh Regression Gede Wellbarn Value 1 Streau 1000 Streau 10000 Streau 10000 Streau 1000 Streau 10000	AND THE AND A STATE	9		NS (NAD 1983)	MD.Ref					
Willing Structure Parting structure Parting structure Manmun Curvature Permite plan Immun Curvature Parting structure	Site:	~			2010/2010/2010/2010/2010	- Prade to the second			+10.00h	r F
Dation Dation<	Well:	STERLING SIL	VER MDP1 33	-4 FED COM 1	N.C. 30	THE W WORD ROT	Nethod:		ture	9
Dation Dation<		73								s t
Painterst (n) untiminor Lation (Lation (Latit)))))))))))))))))))))))))))))))))))	Wellbore:	Wellbore #1			S. S. G					P.
Measure Drff Lamacon Lamacon Partial Partial Lamacon Variant Partial Variant Partial Variant Partial Design Partial Build Partial Lumbol Partial 5,100.00 0.55 447.3 5,00.00 1.07 0.02 1.06 2.00 2.00 0.00 5,300.00 4.50 447.3 5.999.20 1.110 14.06 1.020 2.00 0.00 5,400.00 4.50 447.3 5.597.00 3.04 35.52 2.817 0.00 0.00 5,600.00 10.00 447.3 5.597.57 4.216 447.6 38.38 0.00 0.00 0.00 5,600.00 10.00 447.3 5.597.57 42.16 447.6 10.00 0.00 <td< td=""><td>Design:</td><td>Permitting Plan</td><td>** 241464 -844.009824-064830-104793</td><td>In case district the generic scription and state of the case of</td><td></td><td></td><td></td><td>er 1987 - 2.1, 1997 - 1987 - 1982 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014</td><td></td><td>-</td></td<>	Design:	Permitting Plan	** 241464 -844.009824-064830-104793	In case district the generic scription and state of the case of				er 1987 - 2.1, 1997 - 1987 - 1982 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014		-
Measure Drff Lamacon Lamacon Partial Partial Lamacon Variant Partial Variant Partial Variant Partial Design Partial Build Partial Lumbol Partial 5,100.00 0.55 447.3 5,00.00 1.07 0.02 1.06 2.00 2.00 0.00 5,300.00 4.50 447.3 5.999.20 1.110 14.06 1.020 2.00 0.00 5,400.00 4.50 447.3 5.597.00 3.04 35.52 2.817 0.00 0.00 5,600.00 10.00 447.3 5.597.57 4.216 447.6 38.38 0.00 0.00 0.00 5,600.00 10.00 447.3 5.597.57 42.16 447.6 10.00 0.00 <td< td=""><td>Planned Survey</td><td></td><td>LEVEZ LANGE</td><td>L. I.T. CREW, WCC. CO., MICH</td><td>Lair Barra Inderitation</td><td>LAURISCUS, MARCOLAUS</td><td>THE REAL PROPERTY.</td><td>LADOLL - PERSONAL STREET BY BRIDGING</td><td></td><td>1.56. 011 at 11. 12 A 16. 16. 17. 18. 19</td></td<>	Planned Survey		LEVEZ LANGE	L. I.T. CREW, WCC. CO., MICH	Lair Barra Inderitation	LAURISCUS, MARCOLAUS	THE REAL PROPERTY.	LADOLL - PERSONAL STREET BY BRIDGING		1.56. 011 at 11. 12 A 16. 16. 17. 18. 19
Deft Attemption Lend Edg.		WEX HEPPIZ	FATAN					REAL AL		
Int Int Int Int Int Into Choom Coopen 5.100.00 0.50 4973 5.109.00 0.07 0.08 -0.66 2.00 2.00 0.00 5.300.00 4.50 4973 5.299.77 5.71 6.74 5.20 2.00 2.00 0.00 5.600.00 6.50 4973 5.488.44 20.34 2.401 -16.52 2.00 2.00 0.00 5.600.00 10.00 4973 5.787.67 2.312 2.319 2.566 2.00 2.00 0.00 5.600.00 10.00 4973 5.797.67 2.812 3.19 2.566 2.00 0.00 0.00 5.600.00 10.00 4973 5.797.69 2.82 4.58 4.58 0.00 0.00 0.00 6.300.00 10.00 4973 5.991.61 7.78.28 8.85 -690.30 0.00 0.00 0.00 6.300.00 10.00 4973 6.994.91<	Measured			Vertical			Vertical	Dogleg.	Build	Turn
Structure Structure <t< td=""><td></td><td>Inclination</td><td>Azimuth</td><td></td><td></td><td>+E/-W</td><td></td><td>1. 1. 6 M. Att. 25 77. 5 al 15</td><td>The search of the second se</td><td>2 the second second second second</td></t<>		Inclination	Azimuth			+E/-W		1. 1. 6 M. Att. 25 77. 5 al 15	The search of the second se	2 the second second second second
5,200.00 4.50 4.73 5,199.67 7.71 6.74 5.20 2.00 2.00 0.00 5,400.00 6.50 49.73 5,399.30 11.90 14.05 -10.84 2.00 2.00 0.00 5,670.00 10.00 49.73 5,572.37 28.12 33.19 -25.60 2.00 2.00 0.00 0.00 5,670.00 10.00 49.73 5,572.37 28.12 33.19 -25.60 2.00 0.0	(ft))	ે ડુ(દુ) ન ન ન ન	F ((°)	् (ft) के दिल्ला इन्हें	(ft) 3	, (ft) (ft)	(ft), (ft),	`(*/100m)	(/100ft)	(;/100ff),
5,200.00 4,50 4,673 5,297,7 5,71 6,74 -5,20 2.00 2.00 0.00 5,600,00 8,50 4673 5,48844 20,44 24,01 -18,52 2.00 2.00 0.00 5,674,69 10,00 49,73 5,597,69 30,04 36,52 28,17 0.00 0.00 0.00 5,600,00 10,00 49,73 5,597,69 30,04 36,52 28,17 0.00 0.00 0.00 5,000,00 10,00 49,73 5,692,57 42,16 48,76 -38,38 0.00 0.00 0.00 5,000,00 10,00 49,73 5,692,57 42,16 48,66 0.00 0.00 0.00 6,000,00 10,00 49,73 6,187,97 98,28 116,00 -89,48 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5,100.00	0.50	49.73	5,100.00	0.07	0.08	-0.06	2.00	2.00	0.00
5.400.00 6.50 49.73 5.488.42 20.34 24.01 -15.52 2.00 2.00 0.00 5.677.80 10.00 49.73 5.577.27 22.12 33.19 -25.60 2.00 0.00 5.670.00 10.00 49.73 5.597.57 42.16 49.76 -38.38 0.00 0.00 0.00 5.600.00 10.00 49.73 5.794.05 53.39 63.01 -48.60 0.00 0.00 0.00 5.000.00 10.00 49.73 5.794.05 53.39 63.01 -48.60 0.00 0.00 0.00 6.000.00 10.00 49.73 6.786.107 78.28 10.00 0.00 <t< td=""><td>5,200.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></t<>	5,200.00									1
5,500.00 48,73 5,48,844 20.34 24.01 -16.52 2.00 2.00 0.00 5,600.00 10.00 49,73 5,567.09 30.94 35.52 -28.17 0.00 0.00 0.00 5,600.00 10.00 49,73 5,695.57 42.16 49,76 -38.38 0.00 0.00 0.00 5,600.00 10.00 49,73 5,892.53 64.61 76.26 58.00 0.00 0.00 0.00 6,000.00 10.00 49,73 6,089.49 87.06 102,75 77.25 0.00 0.00 0.00 6,000.00 10.00 49,73 6,084.44 103.95 122,74 -99.86 0.00	5,300.00	4.50	49.73	5,299.77	5.71	6.74	-5.20	2.00	2.00	0.00
5,574.90 10.00 49,73 5,587.03 29.12 33.19 -25.60 2.00 2.00 0.00 5,700.00 10.00 49,73 5,585.57 42.16 49,76 -38.38 0.00 0.00 0.00 5,000.00 10.00 49,73 5,585.57 42.16 49,76 -38.38 0.00 0.00 0.00 5,000.00 10.00 49,73 5,597.05 5,981.61 76.26 -58.81 0.00 0.00 0.00 6,000.00 10.00 49,73 6,187.97 99.28 116.00 -89.46 0.00 0.00 0.00 6,200.00 10.00 49,73 6,284.64 109.50 129.24 -496.68 0.00 0.00 0.00 6,400.00 10.00 49,73 6,584.94 129.50 142.49 -108.68 0.00 0.00 0.00 6,400.00 10.00 49,73 6,581.93 143.17 166.93 -10.05 0.00 0.00 0.00 6,400.00 10.00 49,73 6,581.93 182.47 -150.76 0.00										1
5.600.00 10.00 49.73 5.587.09 30.94 36.82 -28.17 0.00 0.00 0.00 5.800.00 10.00 49.73 5.784.05 53.39 63.01 -48.60 0.00 0.00 0.00 5.800.00 10.00 49.73 5.882.53 64.61 76.26 -58.51 0.00 0.00 0.00 6.000.01 10.00 49.73 6.789.79 96.28 116.275 -79.25 0.00 0.00 0.00 6.200.00 10.00 49.73 6.789.46 100.50 129.24 -99.66 0.00 0.00 0.00 0.00 6.300.00 10.00 49.73 6.684.32 131.95 155.73 -120.11 0.00										1
5,700.00 10.00 49.73 5,594.05 53.39 63.01 -48.60 0.00 0.00 0.00 5,800.00 10.00 49.73 5,594.05 53.39 63.01 -48.60 0.00 0.00 0.00 6,000.00 10.00 49.73 5,591.01 75.83 89.50 -58.81 0.00 0.00 0.00 6,000.00 10.00 49.73 6,187.97 99.28 116.00 -58.46 0.00 0.00 0.00 6,300.00 10.00 49.73 6,283.494 122.72 142.49 -109.96 0.00 0.00 0.00 6,400.00 10.00 49.73 6,581.90 143.17 168.82 -130.33 0.00 0.00 0.00 6,600.00 10.00 49.73 6,778.86 165.62 195.47 -160.96 0.00 0.00 0.00 6,600.00 10.00 49.73 7,774.81 198.28 -131.31 0.00 0.00 0.00 7,000.00<										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
$ \begin{array}{c} 5,900.00 \\ 6,000.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 6,100.00 \\ 10.00 \\ 6,100.00 \\ 10.00 \\ 49,73 \\ 6,182,44 \\ 10,100 \\ 6,100.00 \\ 10.00 \\ 49,73 \\ 6,110 \\ 6,110 \\ 6,100.00 \\ 10.00 \\ 49,73 \\ 6,110 \\ 6,$					53.39	63.01	-48.60	0.00	0.00	0.00
									0.00	0.00
6,200.0010.0049.73 $6,187.97$ 98.28116.00+89.460.000.000.00 $6,300.00$ 10.0049.73 $6,286.49$ 120.72142.49-109.900.000.000.00 $6,500.00$ 10.0049.73 $6,483.42$ 131.95155.73-120.110.000.000.00 $6,600.00$ 10.0049.73 $6,680.38$ 154.39152.23-140.550.000.000.00 $6,700.00$ 10.0049.73 $6,778.86$ 165.62195.47-150.760.000.000.00 $6,600.00$ 10.0049.73 $6,778.86$ 165.62195.47-150.760.000.000.00 $7,000.00$ 10.0049.73 $6,778.86$ 188.06221.97-171.200.000.000.00 $7,000.00$ 10.0049.73 $7,772.72$ 221.73261.70-201.850.000.000.00 $7,300.00$ 10.0049.73 $7,782.72$ 221.73261.70-201.850.000.000.00 $7,300.00$ 10.0049.73 $7,785.71$ 252.40201.850.000.000.00 $7,400.00$ 10.0049.73 $7,768.71$ 254.40301.44-232.500.000.000.00 $7,600.00$ 10.0049.73 $7,768.71$ 254.40301.44-232.500.000.000.00 $7,600.00$ 10.0049.73 $7,768.62$ 374.95-272.980.000.000.00										
6:400.00 10.00 49.73 6:384.94 120.72 142.49 -109.90 0.00 0.00 0.00 6:500.00 10.00 49.73 6:581.90 143.17 186.98 -120.11 0.00 0.00 0.00 6:600.00 10.00 49.73 6;680.80 154.39 182.23 -140.55 0.00 0.00 0.00 6:800.00 10.00 49.73 6;78.86 165.22 154.7 -150.76 0.00 0.00 0.00 7.000.00 10.00 49.73 6;87.53 188.06 22.17 -171.20 0.00 0.00 0.00 7.000.00 10.00 49.73 7,172.79 21.73 261.71 -191.63 0.00 0.00 0.00 7.300.00 10.00 49.73 7,369.75 232.96 274.95 -212.06 0.00 0.00 0.00 7.400.00 10.00 49.73 7,665.71 256.40 314.46 -242.71 0.00 0.00 0.00										
6:500.00 10.00 49.73 6:483.42 131.95 155.73 -120.11 0.00 0.00 0.00 6:600.00 10.00 49.73 6:680.38 154.39 182.23 -140.55 0.00 0.00 0.00 6:600.00 10.00 49.73 6:77.84 165.62 195.47 -160.88 0.00 0.00 0.00 7:000.00 10.00 49.73 6:975.83 188.06 221.97 -171.20 0.00 0.00 0.00 7:000.00 10.00 49.73 7:074.31 199.2 235.21 -181.41 0.00 0.00 0.00 7:000.00 10.00 49.73 7:074.97 210.51 248.46 -191.83 0.00 0.00 0.00 7:000.00 10.00 49.73 7:667.1 256.1 214.26 0.00 0.00 0.00 7:000.00 10.00 49.73 7:665.19 266.23 314.49 -242.71 0.00 0.00 0.00 7:00										
6:00.00 10.00 49.73 6:581.90 143.17 168.98 -130.33 0.00 0.00 0.00 6:00.00 10.00 49.73 6:678.86 154.39 182.23 -140.55 0.00 0.00 0.00 6:800.00 10.00 49.73 6:778.86 165.62 195.47 -160.76 0.00 0.00 0.00 7.000.00 10.00 49.73 6:875.83 188.06 221.97 -171.20 0.00 0.00 0.00 7.000.00 10.00 49.73 7.074.31 199.29 235.21 -191.63 0.00 0.00 0.00 7.300.00 10.00 49.73 7.212.7 221.73 261.70 -201.85 0.00 0.00 0.00 7.400.00 10.00 49.73 7.655.19 266.62 214.48 288.20 -222.28 0.00 0.00 0.00 7.600.00 10.00 49.73 7.656.19 266.62 314.49 -222.93 0.00 0.00				,						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$,						
6 900 00 10 00 49 73 6 877.83 176.84 208.72 -160.98 0.00 0.00 0.00 7 000.00 10 0.00 49.73 6,778.83 188.06 221.97 -171.20 0.00 0.00 0.00 7,100.00 10 0.00 49.73 7,172.79 210.51 248.46 -191.63 0.00 0.00 0.00 7,300.00 10 0.00 49.73 7,271.27 221.73 261.70 -201.85 0.00 0.00 0.00 7,400.00 10 0.00 49.73 7,366.71 232.96 274.95 -212.06 0.00 0.00 0.00 7,600.00 10 0.00 49.73 7,665.71 225.40 301.44 -232.50 0.00 0.00 0.00 7,600.00 10 0.00 49.73 7,665.71 282.74 327.94 -252.93 0.00 0.00 0.00 7,900.00 10 0.00 49.73 7,662.16 282.74 380.92 -233.78 0.00 0.00 0.	6,700.00	10.00	49.73	6,680.38	154.39	182.23	-140.55	0.00	0.00	0.00
7 000.00 10.00 49.73 6.975.83 188.06 221.97 -171.20 0.00 0.00 0.00 7,200.00 10.00 49.73 7,712.79 210.51 235.21 -181.41 0.00 0.00 0.00 7,200.00 10.00 49.73 7,212.72 221.73 261.70 -201.85 0.00 0.00 0.00 7,300.00 10.00 49.73 7,665.71 254.70 -201.85 0.00 0.00 0.00 7,600.00 10.00 49.73 7,665.71 255.40 301.44 -232.50 0.00 0.00 0.00 7,700.00 10.00 49.73 7,665.19 266.62 314.69 -242.71 0.00 0.00 0.00 7,800.00 10.00 49.73 7,665.19 266.62 314.69 -242.71 0.00 0.00 0.00 7,900.00 10.00 49.73 7,862.16 289.07 341.18 -263.14 0.00 0.00 0.00 0.00	6,800.00	10.00	49.73	6,778.86	165.62	195.47	-150.76	0.00	0.00	0.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
7,500.00 10.00 49,73 7,488,23 244,18 288,20 -222,28 0.00 0.00 0.00 7,600.00 10.00 49,73 7,566,71 255,40 301,44 -232,50 0.00 0.00 0.00 7,700.00 10.00 49,73 7,665,61 266,62 314,69 -242,71 0.00 0.00 0.00 7,800.00 10.00 49,73 7,763,68 277,85 327,94 -252,93 0.00 0.00 0.00 8,000.00 10.00 49,73 7,862,16 289,07 341,18 -263,14 0.00 0.00 0.00 8,000.00 10.00 49,73 8,157,60 322,74 380,92 -293,79 0.00 0.00 0.00 8,300.00 10.00 49,73 8,256,08 333,96 394,17 -304,01 0.00 0.00 0.00 8,400.00 10.00 49,73 8,545,55 366,41 420,66 -324,44 0.00 0.00 0.00										
7,700.00 10.00 49.73 7,665.19 266.62 314.69 -242.71 0.00 0.00 0.00 7,800.00 10.00 49.73 7,763.68 277.85 327.94 -252.93 0.00 0.00 0.00 7,900.00 10.00 49.73 7,960.64 300.29 354.43 -273.36 0.00 0.00 0.00 8,000.00 10.00 49.73 8,059.12 311.52 367.67 -283.58 0.00 0.00 0.00 8,200.00 10.00 49.73 8,157.60 322.74 380.92 -293.79 0.00 0.00 0.00 8,300.00 10.00 49.73 8,256.08 333.96 394.17 -304.01 0.00 0.00 0.00 8,400.00 10.00 49.73 8,453.05 356.41 420.66 -324.44 0.00 0.00 0.00 8,600.00 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00				7,468.23			-222.28	0.00		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
8,000.00 10.00 49.73 7,960.64 300.29 354.43 -273.36 0.00 0.00 0.00 8,100.00 10.00 49.73 8,059.12 311.52 367.67 -283.58 0.00 0.00 0.00 8,200.00 10.00 49.73 8,157.60 322.74 380.92 -293.79 0.00 0.00 0.00 8,300.00 10.00 49.73 8,256.08 333.96 394.17 -304.01 0.00 0.00 0.00 8,400.00 10.00 49.73 8,545.56 345.19 407.41 -314.23 0.00 0.00 0.00 8,500.00 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00 8,600.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,000.00 10.00 49.73 8,454.54 412.52 486.89 -375.53 0.00 0.00 0.00 </td <td></td>										
8,100.00 10.00 49.73 8,059.12 311.52 367.67 -283.58 0.00 0.00 0.00 8,200.00 10.00 49.73 8,157.60 322.74 380.92 -293.79 0.00 0.00 0.00 0.00 8,300.00 10.00 49.73 8,256.08 333.96 394.17 -304.01 0.00 0.00 0.00 8,400.00 10.00 49.73 8,354.56 345.19 407.41 -314.23 0.00 0.00 0.00 8,600.01 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00 8,600.01 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,786.49 390.86 460.40 -355.09 0.00 0.00 0.00 8,900.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00										
8,200.00 10.00 49.73 8,157.60 322.74 380.92 -293.79 0.00 0.00 0.00 8,300.00 10.00 49.73 8,256.08 333.96 394.17 -304.01 0.00 0.00 0.00 8,400.00 10.00 49.73 8,354.56 345.19 407.41 -314.23 0.00 0.00 0.00 8,600.00 10.00 49.73 8,453.05 367.63 433.91 -334.66 0.00 0.00 0.00 8,600.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,800.00 10.00 49.73 8,46.97 401.30 473.64 -365.31 0.00 0.00 0.00 9,000.00 10.00 49.73 8,445.45 412.52 486.89 -375.53 0.00 0.00 0.00						367.67	-283.58		0.00	0.00
8,400.00 10.00 49.73 8,354.56 345.19 407.41 -314.23 0.00 0.00 0.00 8,500.00 10.00 49.73 8,453.05 356.41 420.66 -324.44 0.00 0.00 0.00 8,600.00 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00 8,700.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 9,000.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,000.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00							-293.79	0.00	0.00	0.00
8,400.00 10.00 49.73 8,354.56 345.19 407.41 -314.23 0.00 0.00 0.00 8,500.00 10.00 49.73 8,453.05 356.41 420.66 -324.44 0.00 0.00 0.00 8,600.00 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00 8,700.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,900.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 9,000.00 10.00 49.73 8,745.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,000.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00	8,300.00									
8,600.00 10.00 49.73 8,551.53 367.63 433.91 -334.66 0.00 0.00 0.00 8,700.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,900.00 10.00 49.73 8,846.97 401.30 473.64 -365.31 0.00 0.00 0.00 9,000.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,000.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00		10.00								
8,700.00 10.00 49.73 8,650.01 378.85 447.15 -344.88 0.00 0.00 0.00 8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,900.00 10.00 49.73 8,846.97 401.30 473.64 -365.31 0.00 0.00 0.00 9,000.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,100.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,400.00 10.00 49.73 9,339.38 457.42 539.87 -416.39 0.00 0.00 0.00 </td <td></td>										
8,800.00 10.00 49.73 8,748.49 390.08 460.40 -355.09 0.00 0.00 0.00 8,900.00 10.00 49.73 8,846.97 401.30 473.64 -365.31 0.00 0.00 0.00 9,000.00 10.00 49.73 8,846.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,100.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,300.00 10.00 49.73 9,39.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 <td></td>										
8,900.00 10.00 49.73 8,846.97 401.30 473.64 -365.31 0.00 0.00 0.00 9,000.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,100.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,300.00 10.00 49.73 9,339.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,400.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,500.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 </td <td></td>										
9,000.00 10.00 49.73 8,945.45 412.52 486.89 -375.53 0.00 0.00 0.00 9,100.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,300.00 10.00 49.73 9,39.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 9,600.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 <td></td>										
9,100.00 10.00 49.73 9,043.93 423.75 500.14 -385.74 0.00 0.00 0.00 9,200.00 10.00 49.73 9,142.42 434.97 513.38 -395.96 0.00 0.00 0.00 9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,400.00 10.00 49.73 9,339.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 9,600.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 </td <td>9,000.00</td> <td>10.00</td> <td>49.73</td> <td>8,945.45</td> <td>412.52</td> <td>486.89</td> <td>-375.53</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	9,000.00	10.00	49.73	8,945.45	412.52	486.89	-375.53	0.00	0.00	0.00
9,300.00 10.00 49.73 9,240.90 446.19 526.63 -406.18 0.00 0.00 0.00 9,400.00 10.00 49.73 9,339.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 9,700.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 9,900.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00 </td <td></td>										
9,400.00 10.00 49.73 9,339.38 457.42 539.87 -416.39 0.00 0.00 0.00 9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 9,700.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 9,900.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00	9,200.00		49.73	9,142.42						
9,500.00 10.00 49.73 9,437.86 468.64 553.12 -426.61 0.00 0.00 0.00 9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 0.00 9,700.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 10,000.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00										
9,600.00 10.00 49.73 9,536.34 479.86 566.37 -436.82 0.00 0.00 0.00 9,700.00 10.00 49.73 9,634.82 491.09 579.61 -447.04 0.00 0.00 0.00 9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 10,000.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00										
9,700.0010.0049.739,634.82491.09579.61-447.040.000.000.009,800.0010.0049.739,733.30502.31592.86-457.260.000.000.009,900.0010.0049.739,831.78513.53606.11-467.470.000.000.0010,000.0010.0049.739,930.27524.75619.35-477.690.000.000.00										
9,800.00 10.00 49.73 9,733.30 502.31 592.86 -457.26 0.00 0.00 0.00 9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 10,000.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00										
9,900.00 10.00 49.73 9,831.78 513.53 606.11 -467.47 0.00 0.00 0.00 10,000.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00										
10,000.00 10.00 49.73 9,930.27 524.75 619.35 -477.69 0.00 0.00 0.00										
10,100.00 10.00 49.73 10,028.75 535.98 632.60 -487.91 0.00 0.00 0.00		10.00		9,930.27	524.75	619.35	-477.69	0.00	0.00	0.00
	10,100.00	10.00	49.73	10,028.75	535.98	632.60	-487.91	0.00	0.00	0.00

L

COMPASS 5000.1 Build 74

Оху Planning Report

	ne	n a nan manananan 2 na mananan na jama kananananan kanana kanana mananan kanana manana manana na manananan na m
An alter international and the second s	THE REPORT OF THE PARTY OF THE	AND
Database: A HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM
		177H
Company:	TVD Reference:	RKB=26.5' @ 3413.00ft
PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site	NorthReference	Grid
Well STERLING SILVER MDP1 33-4 FED COM 177H	Survey Calculation Method:	Minimum Curvature
		. Î
Wellbore: Wellbore #1		
Design: 2 Permitting Plan	Rangeron	
White and the second	NORTHER STATES OF THE OWNER OF THE OWNER OF THE	ALTER CARLINE AND THE COMMENTATION AND A COMPACT PARTY AND AND AND A COMPACT AND A COMPACT AND A COMPACT AND A

 Weasured
 Vertical
 Vertical
 Dogleg
 I Build
 Turn

 Depth
 Inclination
 Azimuth
 Depth
 +N/-S
 +E/-W
 Section
 Rate
 Rate
 Rate
 Rate
 Rate
 Rate
 Rate
 1/100ft)
 (*/100ft)
 (*/100ft)

S. R.L	Pat 1 1 1 1 1 1 1 1 1		an Marian	AN TATAL	the set	20 Bar 14 8 5.70	CAN'S CRAVE	A share a start of the start of	PARE DUE D	1. Salating and a second
	10,200.00	10.00	49.73	10,127.23	547.20	645.84	-498.12	0.00	0.00	0.00
	10,300.00	10.00	49.73	10,225.71	558.42	659.09	-508.34	0.00	0.00	0.00
	10,330.12	10.00	49.73	10,255.37	561.80	663.08	-511.42	0.00	0.00	0.00
								2:00	-1.78	
	10,400.00	8.76	53.66	10,324.32	568.88	671.99	-517.81			5.63
	10,500.00	7.08	61.61	10,423.37	576.32	683.54	-524.38	2.00	-1.68	7.95
	10,600.00	5.61	74.03	10,522.75	580.59	693.66	-527.90	2.00	-1.46	12.43
	10,700.00	4.57	93.47	10,622.37	581.70	702.34	-528.36	2.00	-1.04	19.44
	10,800.00	4.27	119.35	10,722.08	579.63	709.57	-525.77	2.00	-0.30	25.88
	10,900.00	4.86	143.59	10,821.77	574.39	715.33	-520.12	2.00	0.59	24.23
	11,000.00	6.08	160.37	10,921.32	565.99	719.63	-511.42	2.00	1.22	16.78
	11,100.00	7.64	170.98	11,020.60	554.44	722.45	-499.69	2.00	1.56	10.61
	11,200.00	9.36	177.87	11,119.50	539.74	723.79	-484.94	2.00	1.72	6.89
	11,235.55	10.00	179.74	11,154.54	533.77	723.92	-478.97	2.00	.1.79	5.26
					519.03	723.98	-464.27	10.00	10.00	0.00
	. 11,300.00	16.45	179.74	11,217.26						
	11,400.00	26.45	179.74	11,310.21	482.52	724.15	-427.85	10.00	10.00	0.00
	11,500.00	36.45	179.74	11,395.42	430.42	724;39	-375.87	10.00	10.00	0.00
	11,600.00	46.45	179.74	11,470.28	364.31	724.69		10.00	10.00	0.00
	11,700.00	56.45	179.74	11,532.53	286.21	725.05	-232.00	10.00	10.00	0.00
	11,800.00	66.45	179.74	11,580.27	198.49	725.46	-144.49	10.00	10.00	0.00
	11,900:00	76.45	179.74	11,612.05	103.80	725.89	-50.03	10.00	10.00	0.00
	12,000.00	86.45	179.74	11,626.91	. 5.04	726.34	48.49	10.00	10.00	0.00
	12,032.26	89.67	179.74	11,628.00	-27.19	726.48	80.65	10.00	10.00	0.00
	12,100.00	89.67	179.74	11,628.39	-94.93	726.79	148.23	0.00	0.00	0,00
	12,200.00	89.67	179.74	11,628.96	-194.93	727.25	247.99	0.00	0.00	0.00
	12,300.00	89.67	179.74	11,629.54	-294.93	727.71	347.75	0.00	0.00	0.00
	12,300.00	89.67	179.74	11,630.11	-394.92	728.16	447.51	0.00	0.00	0.00
	12,500.00	89.67	179.74	11,630.69	-494.92	728.62	547.26	0.00	0.00	0.00
	12,600.00	89.67	179.74	11,631.26	-594.92	729.08	647.02	0.00	0.00	0.00
	12,700.00	89.67	179.74	11,631.83	-694.92	729.54	746.78	0.00	0.00	0.00
	12,800.00	89.67	179.74	11,632.41	-794.91	729.99	846.54	0.00	0.00	0.00
	12,900.00	89.67	179.74	11,632.98	-894.91	730.45	946.30	0.00	0.00	0.00
	13,000.00	89.67	179.74	11,633.56	-994.91	730.91	1,046.06	0.00	0.00	0.00
	13,100.00	89.67	179.74	11,634.13	-1,094.90	731.37	1,145.82	0.00	0.00	0.00
	13,200.00	89.67	179.74	11,634.70	-1,194.90	731.82	1,245.58	0.00	0.00	0.00
		89.67	179.74	11,635.28	-1,294.90	732.28	1,345.34	0.00	0.00	0.00
	13,300.00					732.74	1,445.10	0.00	0.00	0.00
	13,400.00	89.67	179.74	11,635.85	-1,394.90					
	13,500.00	89.67	179.74	11,636.43	-1,494.89	733.19	1,544.86	0.00	0.00	0.00
	13,600.00	89.67	179.74	11,637.00	-1,594.89	733.65	1,644.61	0.00	0.00	0.00
	13,700.00	89.67	179.74	11,637.57	-1,694.89	734.11	1,744.37	0.00	0.00	0.00
	13,800.00	89.67	179.74	11,638.15	-1,794.89	734.57	1,844.13	0.00	0.00	0.00
	13,900.00	89.67	179.74	11,638.72	-1,894.88	735.02	1,943.89	0.00	0.00	0.00
	14.000.00	89.67	179.74	11,639.30	-1,994.88	735.48	2,043.65	0.00	0.00	0.00
	14,100.00	89.67	179,74	11,639.87	-2,094.88	735.94	2,143.41	0.00	0.00	0.00
			179.74	11,640.44	-2.194.87	736.40	2,243.17	0.00	0.00	0.00
	14,200.00	89.67		,	-,	736.85	2,243.17 2,342.93	0.00	0.00	0.00
	14,300.00	89.67	179.74	11,641.02	-2,294.87					
	14,400.00	89.67	179.74	11,641.59	-2,394.87	737.31	2,442.69	0.00	0.00	0.00
	14,500.00	89.67	179.74	11,642.17	-2,494.87	737.77	2,542.45	0.00	0.00	0.00
	14,600.00	89.67	179.74	11,642.74	-2,594.86	738.22	2,642.21	0.00	0.00	0.00
	14,700.00	89.67	179.74	11,643.31	-2,694.86	738.68	2,741.97	0.00	0.00	0.00
	14,800.00	89.67	179.74	11,643.89	-2,794.86	739.14	2,841.72	0.00	0.00	0.00
	14,900.00	89.67	179.74	11,644.46	-2,894.86	739.60	2,941.48	0.00	0.00	0.00
					-	740.05	3,041.24	0.00	0.00	0.00
	15,000.00	89.67	179.74	11,645.04	-2,994.85	740.05	5,071.24	0.00	0.00	0.00
							•			TACC FOOD 1 Build

}

COMPASS 5000.1 Build 74

4

n un anna a mar in dhaanaa aa aya siyadh " na kusa	ta sme si psk dot a missiona a 🥌 prevalet	na o osteriale deserva					*****		
Database:	HOPSPP	07127.247.2.65	RC. 1202 J.S. M.M. 1. S. P.	Local	Co-ordinate Re	ference:		SILVER MDP	1 33-4 FED COM
				TALL A		e cet a son	177H		[
Company: Stark I	ENGINEERING D	ESIGNS		TVDR	eference:		RKB=26.5' @ 34	13.00ft	
Project:	PRD NM DIRECT	IONAL PLA	ANS (NAD 1983		ference:		RKB=26.5' @ 34		
Site:	STERLING SILVE	R MDP1 3	3-4 FED COM	23 6.24, 16 9.05	Reference		Grid		
Well:	STERLING SILVE	R MDP1 3	3-4 FED COM 1	20.272.276.2.19.1.2.2	Calculation N	lethod:	Minimum Curvat	ure `	
						形理书 化带			
Wellbore:	Wellbore #1								
BAR OR BOARD BUCK SH	Permitting Plan								
I Stanis Reining Reining and Annual Reining and Stanis					esta a de site e	A STATISTICS	an a sa manana a sa dana ata padagan santa A sa a sa manana sa sa dana ata pada sa sa da da		
Planned Survey									
	the states								
Measured re-	ALL ALL SALES	和研究	Vertical			Vertical		Build	Turnesse
		imuth	Depth	*+N/-S	aller and a second second	Section	الملاق أواقي المرجاة المرجان الأرار ال	Rate	Rate
(ft) (ft)		((°)))))))))))))))))))))))))))))))))))	••••• (ft), 134 -	(ft)	32.(ft))	(ft) 	(°/100ft)	/100ft)	(*/100ft)
15,100.00	89.67	179.74	11,645.61	-3,094.85	740.51	3,141.00	0.00	0.00	0.00
15,200.00	89.67	179.74	11,646.18	-3,194.85	740.97	3,240.76	0.00	0.00	0.00
15,300.00	89.67	179.74	11,646.76	-3,294.85	741.43	3,340.52	0.00	0.00	0.00
15,400.00	89.67	179.74	11,647.33	-3,394.84	741.88	3,440.28	0.00	0.00	0.00
15,500.00	89.67	179.74	11,647.91	-3,494.84	742.34	3,540.04	0.00	0.00	0.00
15,600.00	89.67	179.74	11,648.48	-3,594.84	742.80	3,639.80	0.00	0.00	0.00
15,700.00	89.67	179.74	11,649.06	-3,694.83	743.25	3,739.56	0.00	0.00	0.00
15,800.00	89.67	179.74	11,649.63	-3,794.83	743.71	3,839.32	0.00	0.00	0.00
15,900.00	89.67	179.74	11,650.20	-3,894.83	744.17	3,939.08	0.00	0.00	0.00
16,000.00	89.67	179,74	11,650.78	-3,994.83	744.63	4.038.83	0.00	0.00	0.00
16,100.00	89.67	179.74	11,651.35	-3,994.63 -4.094.82	744.63	4,038.63	0.00	0.00	0.00
16,200.00	89.67	179.74	11,651.93	-4,194.82	745.54	4,238.35	0.00	0.00	0.00
16,300.00	89.67	179.74	11,652.50	-4,294.82	746.00	4,338.11	0.00	0.00	0.00
16,400.00	89.67	179.74	11,653.07	-4,394.82	746.46	4,437.87	0.00	0.00	0.00
16,500.00	89.67	179.74	11,653.65	-4,494.81	746.91	4,537.63	0.00	0.00	0.00
16,600.00	89.67	179.74	11,654.22	-4,594.81	747.37	4,637.39	0.00	0.00	0.00
16,700.00	89.67	179.74	11,654.80	-4,694.81	747.83	4,737.15	0.00	0.00	0.00
16,800.00	89.67	179.74	11,655.37	-4,794.80	748.28	4,836.91	0.00	0.00	0.00
16,900.00	89.67	179.74	11,655.94	-4,894.80	748.74	4,936.67	0.00	0.00	0.00
				-4,994.80	740.20		0.00	0.00	0.00
17,000.00 17,100.00	89.67 89.67	179.74 179.74	11,656.52 11.657.09	-4,994.80 -5,094.80	749.20 749.66	5,036.43 5,136.19	0.00	0.00	0.00
17,100.00	89.67	179.74	11,657.67	-5,194.79	750.11	5,235.94	0.00	0.00	0.00
17,300.00	89.67	179.74	11.658.24	-5,294.79	750.57	5,335.70	. 0.00	0.00	0.00
17,400.00	89.67	179.74	11,658.81	-5,394.79	751.03	5,435.46	0.00	0.00	0.00
	89.67	179.74	11,659.39	-5,494,79	· 751.49	5,535.22	0.00	0.00	0.00
17,500.00 17,600.00	89.67	179.74	11,659.96	-5,594.78	751.94	5,634.98	0.00	0.00	0.00
17,000.00	89.67	179.74	11,660.54	-5,694.78	752.40	5,734.74	0.00	0.00	0.00
17,800.00	89.67	179.74	11,661.11	-5,794.78	752.86	5,834.50	0.00	0.00	0.00
17,900.00	89.67	179.74	11,661.68	-5,894.78	753.31	5,934.26	0.00	0.00	0.00
18.000.00	89.67	179.74	11,662.26	-5,994.77	753.77	6,034.02	0.00	0.00	0.00
18,000.00	89.67	179.74	11,662.83	-5,994.77 -6,094.77	754.23	6,133.78	0.00	0.00	0.00
18,200.00	89.67	179.74	11,663.41	-6,194.77	754.69	6,233.54	0.00	0.00	0.00
18,300.00	89.67	179.74	11,663.98	-6,294.76	755.14	6,333.30	0.00	0.00	0.00
18,400.00	89.67	179.74	11,664.55	-6,394.76	755.60	6,433.05	0.00	0.00	0.00
18,500,00	89.67	179.74	11,665.13	-6,494.76	756.06	6,532.81	0.00	0.00	0.00
18,600.00	89.67	179.74	11,665.70	-6,594.76	756.52	6,632.57	0.00	0.00	0.00
18,700.00	89.67	179,74	11,666.28	-6,694.75	756.97	6,732.33	0.00	0.00	0.00
18,800.00	89.67	179.74	11,666.85	-6,794.75	757.43	6,832.09	0.00	0.00	0.00
18,900.00	89.67	179.74	11,667.42	-6,894.75	757.89	6,931.85	0.00	0.00	0.00
19,000.00	89.67	179.74	11,668.00	-6,994.75	758.34	7,031.61	0.00	0.00	0.00
19,000.00	89.67	179.74	11,668.57	-7,094.74	758.80	7;131.37	0.00	0.00	0.00
19,200.00	89.67	179.74	11,669.15	-7,194.74	759.26	7,231.13	0.00	0.00	0.00
19,300.00	89.67	179.74	11,669.72	-7,294.74	759.72	7,330.89	0.00	0.00	0.00
19,400.00	89.67	179.74	11,670.29	-7,394.73	760.17	7,430.65	0.00	0.00	0.00
				-7,494.73	760.63	7,530.41	0.00	0.00	0.00
19,500.00	89.67 89.67	179.7 4 179.74	11,670.87 11,671.44	-7,494.73 -7,594.73	760.63	7,630.41	0.00	0.00	0.00
19,600.00 19,700.00	89.67	179.74	11,671.44	-7,694.73	· 761.54	7,729.92	0.00	0.00	0.00
19,700.00	89.67	179.74	11,672.02	-7,094.73	761.54	7,829.68	0.00	0.00	0.00
19,800.00	89.67	179.74	11,673.17	-7,894.72	762.00	7,929.44	0.00	0.00	0.00
	00 67	179.74	11,673.74	-7,994.72	762.92	8,029.20	0.00	0.00	0.00
20,000.00	89.67								
20,000.00 20,100.00 20,200.00	89.67 89.67 89.67	179.74 179.74 179.74	11,674.31 11,674.89	-8,094.72 -8,194.71	763.37 763.83	8,128.96 8,228.72	0.00	0.00	0.00 0.00

COMPASS 5000.1 Build 74

atabase:	IOPSPP	r i i i i i i i i i i i i i i i i i i i	a a sha kara a sha a a a a a a a a a a a a a a a a	Local	o-ordinate R	eference:	Well STERLING	SILVER MDP	1 33-4 FED COM
ompany:		DESIGNS	K	TVD Re	ference:		RKB=26.5'@3	413 በበ በ	
The state of the second se	RD NM DIREC		ANS (NAD 198	1 1 2 1 2 1 2 1	erence:	and the second second	RKB=26.5' @ 3		
	TERLING SIL		•	Cor softwarm	leference:	- SUP	Grid	410.001	
PRATE WARD A SAUDA	TERLING SIL			(*C+127277, 222)	Calculation	Method	Minimum Curva	iture	
			C TT ED COM		S. 1975 5	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		laic	
lellbore:	Vellbore #1				No. Carles				
HALL DORA & BARA	Permitting Plan					a - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
	The second	ar veneral ministration of a special	and a subscription of the subscription of the	E VI GUNT	THE REAL PROPERTY OF	Let be a weather	Landard and the second	advanteer - Friedrahmetrie für seine Auflichter - Standardingen, - Deutster Frie	and have yet a special data to be
lanned Survey									
		of West Street	うって 大学 神聖	合于1000mm 半击				「「東京」	
Measured			Vertical	Press Press		Vertical	Dogleg	Build	Turn
	clination 👾	さいてん ぞう ごち ぼしん	Depth	+N/-S	*+E/-W/****	Section	Rate	Rate	Rate 3
-3) 		ترابيه، بر - (°) بلا	(ft)/ 개발	(ft)* 2	°(ft), ∮*, s	•***(ft)	्(î/100ft)	°/100ft) - 3	(°/100ft)
20,300.00	89.67	179.74	11.675.46	-8,294.71	764.29	8,328.48	0.00	0.00	0.00
20,400.00	89.67	179.74	11,676.04	-8,394.71	764.75	8,428.24	0.00	0.00	0.00
20,500.00	89,67	179.74	11,676.61	-8,494,71	765.20	8,528.00	0.00	0.00	0.00
20,500.00	89.67	179.74	11,677.18	-8,594,70	765.66	8,627.76	0.00	0.00	0.00
20,700.00	89.67	179.74	11,677.76	-8.694.70	766.12	8,727.52	0.00	0.00	0.00
20,800.00	89.67	179.74	11,678.33	-8,794.70	766.57	8,827.27	0.00	0.00	0.00
20,900.00	89.67	179.74	11,678.91	-8,894.69	767.03	8,927.03	0.00	0.00	0.00
21.000.00	89.67	179.74	11.679.48	-8,994.69	767.49	9.026.79	0.00	0.00 ,	0.00
21,100.00	89.67	179.74	11.680.05	-9,094.69	767.95	9,126.55	0.00	0.00	0.00
21,200,00	89.67	179,74	11,680.63	-9,194.69	768.40	9,226.31	0.00	0.00	0.00
21.300.00	89.67	179.74	11,681.20	-9,294.68	768.86	9,326.07	0.00	0.00	0.00
21,400.00	89.67	179.74	11,681.78	-9,394.68	769.32	9,425.83	0.00	0.00	0.00
21,500.00	89.67	179.74	11,682,35	-9,494.68	769.78	9,525.59	0.00	0.00	0.00
21,600.00	89.67	179.74	11,682.92	-9,594.68	770.23	9,625.35	0.00	0.00	0.00
21,700.00	89.67	179.74	11,683.50	-9,694.67	770.69	9,725.11	0.00	0.00	0.00
21,800.00	89.67	179.74	11,684.07	-9,794.67	771.15	9,824.87	0.00	0.00	0.00
21,900.00	89.67	179.74	11,684.65	-9,894.67	771.60	9,924.63	0.00	0.00	0.00
22.000.00	89.67	179.74	11,685.22	-9,994.67	772.06	10,024.38	0.00	0.00	0.00
22,100.00	89.67	179.74		-10,094.66	772.52	10,124.14	0.00	0.00	0.00
22,100.00	89.67	179.74	11,686.37	-10,194.66	772.98	10,223.90	0.00	0.00	0.00
22,200.00		179.74	11,686.94	-10,294.66	773.43	10,323.66	0.00	0.00	. 0.00
	89.67	1/9./4	11,000.04						
22,200.00	89.67 89.67	179.74	11,687.52	-10,394.65	773.89	10,423.42	0.00	, 0.00	0.00

Design Targets

444

7.85

the states

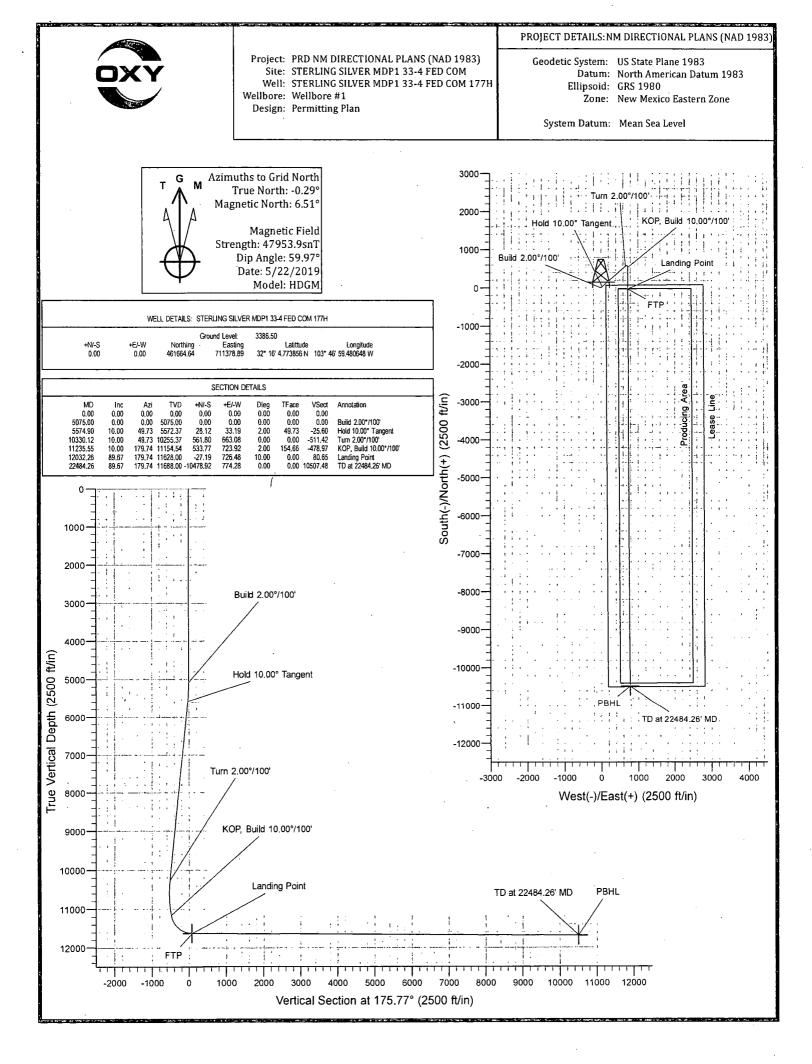
14784.7

FTP (Sterling Silver - plan hits target center - Point 712,105.33 32° 16' 4.467867 N 103° 46' 51.021567 0.00 0.00 11,628.00 -27.19 726.48 461,637.45 712,153.12 32° 14' 21.045976 N 103° 46' 51.091352 0.00 11,688.00 -10,478.92 774.28 451,186.35 PBHL (Sterling Silver 0.00 plan hits target center
 Point

Plan Annotations; Measured Vertical Local Coordinates Depth Depth +N/S +E/W (ft) (ft) (ft)

المستعدية الم			Comments
5,075.00	0.00	0.00	Build 2.00°/100'
5,572.37	28.12	33.19	Hold 10.00° Tangent
10,255.37	561.80	663.08	Turn 2.00°/100'
11,154.55	533.77	723.92	KOP, Build 10.00°/100'
11,628.00	-27.19	726.48	Landing Point
11,688.00	-10,478.91	774.28	TD at 22484.26' MD
	5,075.00 5,572.37 10,255.37 11,154.55 11,628.00	5,075.00 0.00 5,572.37 28.12 10,255.37 561.80 11,154.55 533.77 11,628.00 -27.19	5,075.00 0.00 0.00 5,572.37 28.12 33.19 10,255.37 561.80 663.08 11,154.55 533.77 723.92 11,628.00 -27.19 726.48

5/22/2019 8:09:18AM



Oxy USA Inc. - Sterling Silver MDP1 33-4 Federal Com 177H

1. Geologic Formations

TVD of target	11688'	Pilot Hole Depth	N/A
MD at TD:	22484'	Deepest Expected fresh water:	463'

Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	463	
Salado	820	Brine
Castile	2,744	Brine
Lamar/Delaware	4,251	Brine
Bell Canyon	4,278	Oil/Gas
Cherry Canyon	5,160	Oil/Gas
Brushy Canyon	6,444	Losses
Bone Spring	8,054	Oil/Gas
1st Bone Spring	9,118	Oil/Gas
2nd Bone Spring	9,764	Oil/Gas
3rd Bone Spring	10,918	Oil/Gas
Wolfcamp	11,386	Oil/Gas

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

2. Casing Program

									Buoyant	Buoyant
Hole Size (in)	Casing Int	erval	Csg. Size	Weight			SE .	SF Burst	Body SF	Joint SF
Hole Size (m):		To (ft)	(in)	(lbs)	Grade	Conn:		SL BERZI	Tension	Tension
17.5	0	513	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4301	9.625	43.5	L-80	BTC	1.125	1,2	1.4	1.4
8.5	0	· 11135	7.625	26.4	L-80 HC	SF (0 ft to 4000 ft) FJ (4000 ft to 11135 ft)	1.125	1.2	1.4	1.4
6.75	0	22484	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Value	s will meet o	or Exceed	

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

*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.

*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.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate 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
	11
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?	Ŷ
If yes, are the first three strings cemented to surface?	<u>Y</u>
Is 2 nd string set 100' to 600' below the base of salt?	Y
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?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing String	#Sks	Wt. (lb/gal)	Ýldi (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A ·	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	547	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	921	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)	218	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage	(Tail Slurry) to	be pumped a	as Bradenhea	d Squeeze fro	m surface, do	wn 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)	352	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	513	100%
Intermediate (Lead)	0	3801	50%
Intermediate (Tail)	3801	4301	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6694	11135	5%
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6694	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10635	22484	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	Туре			Tested to:							
		3M	Annula	r	1	70% of working pressure							
12.25% Hala	13-5/8"		Blind Ra	am	✓								
12.25" Hole	13-3/8	214	Pipe Ra	m		250 mai / 2000 mai							
		3M	Double R	lam	 ✓ 	250 psi / 3000 psi							
			Other*										
		5M	Annula	ır	4	70% of working pressure							
Q 5 U TTala	17 5 /0"		Blind Ra	am	✓	250 mi (5000 mi							
8.5" Hole	13-5/8"	514	Pipe Ra	m									
	·	5M	Double F	lam	 ✓ 	250 psi / 5000 psi							
			Other*										
		5M	Annula	ır	. 🖌	70% of working pressure							
(75) 11	12 5/02		Blind R	Blind Ram									
6.75" Hole	13-5/8"	13-5/8"	13-5/8"	13-5/8"		1014	Pipe Ram		Pipe Ram			250 mai / 10000 mai	
		10M	10M Double Ram 🗸	1	250 psi / 10000 psi								
			Other*										

*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. Due to the four string design, Oxy plans to employ a 13-3/8" 3K sacrificial wellhead that will be employed to drill the 12.25" Intermediate Hole. Upon completion of drilling and cementing operations on the 12.25" Intermediate Hole section (along with proper WOC time), the wellhead will be cut off and salvaged. At this point, a standard 13-5/8 MNDS 10x10 Slips (13.375 x 9.625 x 7.625 x 5.5) wellhead will be welded onto the 9-5/8" casing for the remainder of drilling operations on the pad. 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.

Oxy USA Inc. - Sterling Silver MDP1 33-4 Federal Com 177H

De From (ft)	pth To (ft)	Туре	Weight (ppg)	Viscosity	Water Loss
0	513	Water-Based Mud	8.6-8.8	40-60	N/C
513 ·	4301	Saturated Brine- Based Mud	9.8-10.0	35-45	N/C
4301	11135	Water-Based or Oil- Based Mud	8.0-9.6	38-50	N/C
11135	22484	Water-Based or Oil- Based Mud	9.5-12.0	38-50	N/C

5. Mud Program

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	PVT/MD Totco/Visual Monitoring
of fluid?	

6. Logging and Testing Procedures

Logg	Logging, 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			

Oxy USA Inc. - Sterling Silver MDP1 33-4 Federal Com 177H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7294 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	174°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 five 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
 Will more than one drilling rig be used for drilling operations? If yes, describe. 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. 	Yes

Total estimated cuttings volume: 1686.8 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
Lucas Garibaldi	Drilling Engineer	713-366-5763	281-795-9270
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

8 Drilling Plan

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.

Component	OD	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

Pilot hole and Lateral sections, 10M requirement

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