K

Received by OCL): 5/23/2023 7:	42:52 AM		Page 1 of						
Form 3160-5 (June 2019)		UNITED STATES ARTMENT OF THE INTE			Ex	FORM APPROVED OMB No. 1004-0137 pires: October 31, 2021				
	BURI	EAU OF LAND MANAGE	5. Lease Serial No.	NMNM14497A						
	not use this f	IOTICES AND REPORTS form for proposals to du Use Form 3160-3 (APD)	6. If Indian, Allottee	or Tribe Name						
	SUBMIT IN T	TRIPLICATE - Other instruction	7. If Unit of CA/Agr	eement, Name and/or No.						
1. Type of Well										
✔ Oil V	Well Gas W	Vell Other			8. Well Name and No.	8. Well Name and No. KEYSTONE 6 FED COM/404H				
2. Name of Operato		CES INCORPORATED			9. API Well No. 3002	2550605				
		BY 2, HOUSTON, TX 77(3b. P	Phone No. <i>(incli</i> 3) 651-7000	ıde area code)	10. Field and Pool or					
4. Location of Well SEC 6/T25S/R34		R.,M., or Survey Description)			11. Country or Parish LEA/NM	ı, State				
	12. CHE	CK THE APPROPRIATE BOX(E	ES) TO INDICA	TE NATURE O	F NOTICE, REPORT OR OT	HER DATA				
TYPE OF SU	JBMISSION			TYPE	OF ACTION					
✓ Notice of Int	ent	Acidize	Deepen Hydraulic	Fracturing	Production (Start/Resume) Reclamation	Water Shut-Off				
Subsequent I	Report	Casing Repair	New Cons	truction	Recomplete	✓ Other				
	-	Change Plans	Plug and A	_	Temporarily Abandon					
Final Abando	onment Notice	Convert to Injection	Plug Back		Water Disposal					
completion of the completed. Fination is ready for fination for finati	ne involved operatic al Abandonment Nor l inspection.) tfully requests an	ons. If the operation results in a mu	ultiple completi quirements, inc	on or recomplet luding reclamati	ion in a new interval, a Form 2	ust be filed within 30 days following 3160-4 must be filed once testing has been the operator has detennined that the site				
Keystone 6 I	Fed Com 713H (F	KA 404H) API #: 30-025-50605	5							
Change nam	ne from Keystone	6 Fed Com 404H to Keystone 6	6 Fed Com 71	3H.						
-		84-E, Sec 7, 2539' FNL, 2614' F 9' FNL, 2310' FEL, Lea Co., N.I		NM,						
Change targ	et formation to Wo	olfcamp Clastics Y.								
Continued or	page 3 additiona	linformation								
		true and correct. Name (Printed/	Regulatory S	Specialist						
STAR HARRELL	/ Ph: (432) 848-9	161	Title							
Signature			Date	e	04/12/2	2023				
		THE SPACE FO	R FEDERA		TE OFICE USE					
Approved by										
KEITH P IMMAT	TY / Ph: (575) 988	3-4722 / Approved		ENGIN Title	EER	05/01/2023 Date				
		hed. Approval of this notice does r equitable title to those rights in the		r l						

certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Additional Remarks

Update casing and cement program to current design.

Update HSU to 479.76 acres.

Update the Pool as reflected in the C-102.

Location of Well

0. SHL: LOT 3 / 302 FNL / 2039 FWL / TWSP: 25S / RANGE: 34E / SECTION: 6 / LAT: 32.165966 / LONG: -103.510917 (TVD: 0 feet, MD: 0 feet) PPP: NESW / 2640 FSL / 2614 FWL / TWSP: 25S / RANGE: 34E / SECTION: 6 / LAT: 32.159552 / LONG: -103.509059 (TVD: 10760 feet, MD: 13162 feet) PPP: NENW / 0 FNL / 2614 FWL / TWSP: 25S / RANGE: 34E / SECTION: 7 / LAT: 32.152298 / LONG: -103.50906 (TVD: 10760 feet, MD: 15801 feet) PPP: LOT 3 / 100 FNL / 2614 FWL / TWSP: 25S / RANGE: 34E / SECTION: 6 / LAT: 32.16652 / LONG: -103.509058 (TVD: 10495 feet, MD: 10525 feet) BHL: SENW / 2539 FNL / 2614 FWL / TWSP: 25S / RANGE: 34E / SECTION: 7 / LAT: 32.145318 / LONG: -103.509061 (TVD: 10760 feet, MD: 18340 feet) DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-7283 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 DISTRICT IV DISTRICT IV 2020 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

Released

0

Imaging:

7/5/2023 2:52:43 PM

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

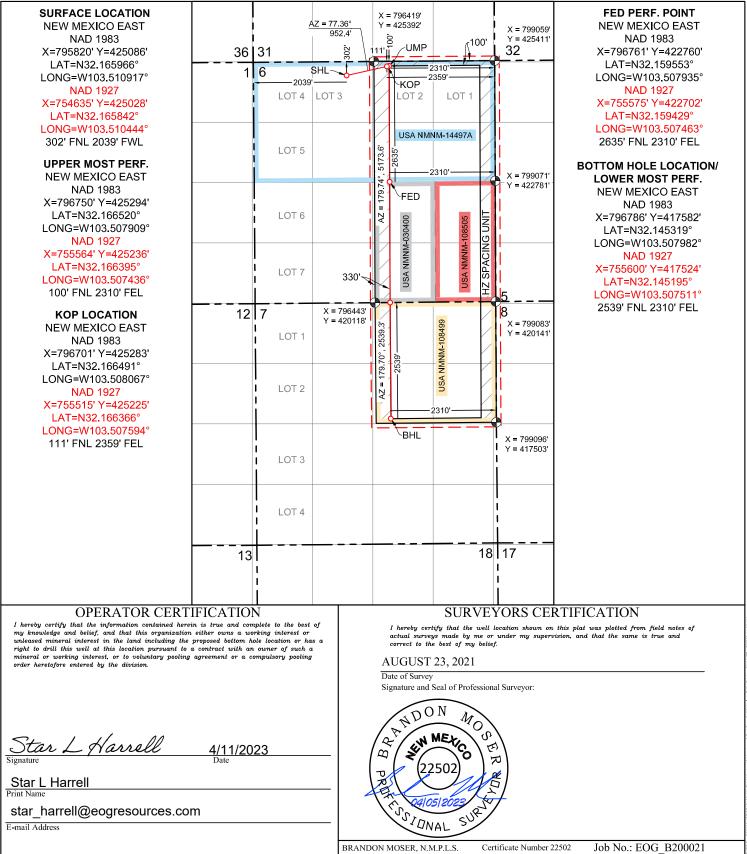
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

□ AMENDED REPORT

|--|

م 30-025-50	PI Number)605		Pool CodePool Name98092WC-025 G-09 S243336I; Upper Wolfcamp						
Property C	ode				Property Name			Well Nun	nber
32829	99			KE	YSTONE 6 FE	ED COM		713⊢	1
OGRID N	0.				Operator Name			Elevatio	on
7377				EC	OG RESOURC	ES, INC.		3450	'
			Surface Location						
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	6	25 S	34 E		302	NORTH	2039	WEST	LEA
		•	Bott	om Hole	Location If Dif	ferent From Surfac	ce	•	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	7	25 S	34 E	4 E 2539 NORTH 2310 EAST LEA					
Dedicated Acres	Joint or	Infill	Consolidated Code Order No.						
479.76				PENDING COM AGREEMENT					

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.



Page 4 of 30

Seog resources

Keystone 6 Fed Com 713H

Revised Permit Information 03/09/2023:

Well Name: Keystone 6 Fed Com 713H

Location: SHL: 302' FNL & 2039' FWL, Section 6, T-25-S, R-34-E, Lea Co., N.M. BHL: 2539' FNL & 2310' FEL, Section 7, T-25-S, R-34-E, Lea Co., N.M.

Casing Program:

Hole	Interv	al MD	Interval TVD		Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
12-1/4"	0	1,290	0	1,290	9-5/8"	36#	J-55	LTC
8-3/4"	0	11,532	0	11,450	7-5/8"	29.7#	HCP-110	FXL
6-3/4"	0	11,032	0	10,950	5-1/2"	20#	P110-EC	DWC/C IS MS
6-3/4"	11,032	11,532	10,950	11,450	5-1/2"	20#	P110-EC	Vam Sprint SF
6-3/4"	11,532	20,066	11,450	12,430	5-1/2"	20#	P110-EC	DWC/C IS MS

Variance is requested to waive the centralizer requirements for the 7-5/8" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4 hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 5-1/2" casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 5-1/2" casing by 7-5/8" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422" annulus clearance requirement from Onshore Order #2 under the following conditions:

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

		Wt.	Yld	Slurry Description
Depth	No. Sacks	ppg	Ft3/sk	Siurry Description
1,290'	350	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-
9-5/8''				Flake (TOC @ Surface)
	80	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium
				Metasilicate (TOC @ 1,090')
11,450'	450	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3%
7-5/8''				Microbond (TOC @ 7,650')
	1310	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-
				M + 6% Bentonite Gel (TOC @ surface)
20,066'	790	13.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond
5-1/2''				(TOC @ 10,950')

Cementing Program:



Additive	Purpose					
Bentonite Gel	Lightweight/Lost circulation prevention					
Calcium Chloride	Accelerator					
Cello-flake	Lost circulation prevention					
Sodium Metasilicate	Accelerator					
MagOx	Expansive agent					
Pre-Mag-M	Expansive agent					
Sodium Chloride	Accelerator					
FL-62	Fluid loss control					
Halad-344	Fluid loss control					
Halad-9	Fluid loss control					
HR-601	Retarder					
Microbond	Expansive Agent					

EOG requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (7,845') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 310 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

0				
Measured Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 1,290'	Fresh - Gel	8.6-8.8	28-34	N/c
1,290' - 11,450'	Brine	10.0-10.2	28-34	N/c
11,450' - 12,031'	Oil Base	8.7-9.4	58-68	N/c - 6
12,031' - 20,066'	Oil Base	10.0-14.0	58-68	4 - 6
Lateral	Oli Dase	10:0-14:0	38-08	4 - 0

Mud Program:



Wellhead & Offline Cementing:

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"

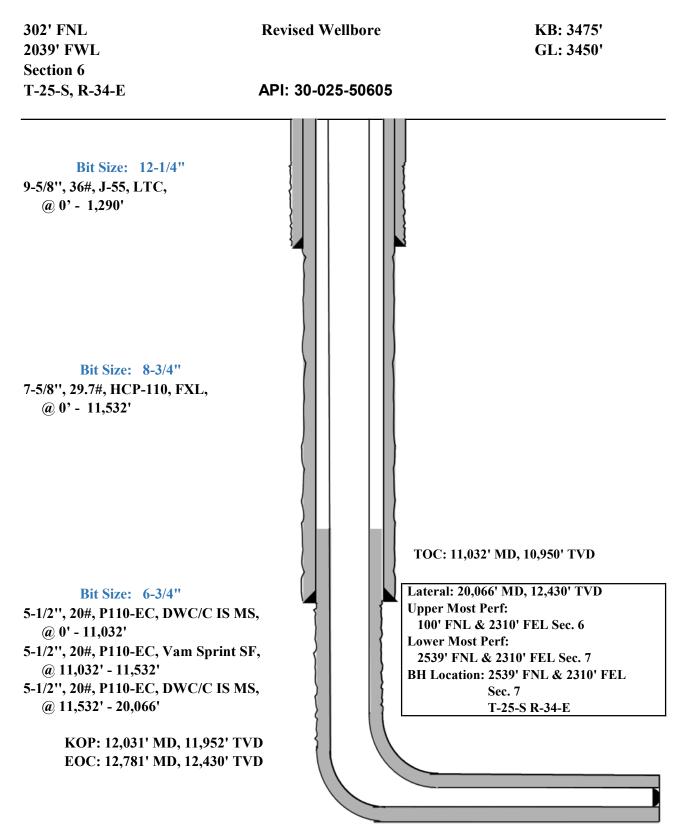


TUBING REQUIREMENTS

EOG respectively requests an exception to the following NMOCD rule:

 19.15.16.10 Casing AND TUBING RQUIREMENTS: J (3): "The operator shall set tubing as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone."

With horizontal flowing and gas lifted wells an end of tubing depth placed at or slightly above KOP is a conservative way to ensure the tubing stays clean from debris, plugging, and allows for fewer well interventions post offset completion. The deeper the tubulars are run into the curve, the higher the probability is that the tubing will become stuck in sand and or well debris as the well produces over time. An additional consideration for EOT placement during artificial lift installations is avoiding the high dog leg severity and inclinations found in the curve section of the wellbore to help improve reliability and performance. Dog leg severity and inclinations tend not to hamper gas lifted or flowing wells, but they do effect other forms of artificial lift like rod pump or ESP (electric submersible pump). Keeping the EOT above KOP is an industry best practice for those respective forms of artificial lift.





Design B 4. CASING PROGRAM

Hole	Interv	al MD	Interval TVD		Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
13"	0	1,290	0	1,290	10-3/4"	40.5#	J-55	STC
9-7/8"	0	11,532	0	11,450	8-3/4"	38.5#	P110-EC	SLIJ II NA
7-7/8"	0	20,066	0	12,430	6"	22.3#	P110-EC	DWC/C IS

Variance is requested to waive the centralizer requirements for the 8-3/4" casing in the 9-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 9-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 6" casing in the 7-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 7-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 6" casing by 8-3/4" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422" annulus clearance requirement from Onshore Order #2 under the following conditions:

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

		Wt.	Yld	Shummy Decomination
Depth	No. Sacks	ppg	Ft3/sk	Slurry Description
1,290'	330	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk
10-3/4"				Cello-Flake (TOC @ Surface)
	70	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 1,090')
11,450'	510	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3%
8-3/4"				Microbond (TOC @ 7,650')
	1480	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-
				M + 6% Bentonite Gel (TOC @ surface)
20,066'	1280	13.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond
6"				(TOC @ 10,950')

<u>Cementing Program</u>:



EOG requests variance from minimum standards to pump a two stage cement job on the 8-3/4" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (7,845') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 483 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

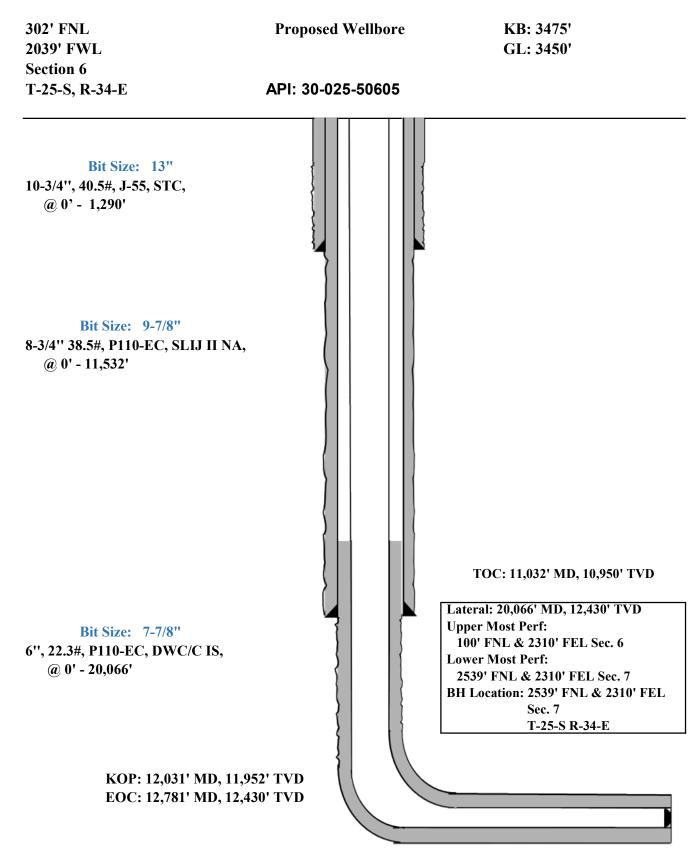
EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Wellhead & Offline Cementing:

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"







Midland

Lea County, NM (NAD 83 NME) Keystone 6 Fed Com #713H

OH

Plan: Plan #0.1 RT

Standard Planning Report

10 April, 2023



ecgre							
Database: Company: Project: Site: Well: Wellbore: Design:	PEDM Midland Lea County, N Keystone 6 Fo #713H OH Plan #0.1 RT	NM (NAD 83 NI ed Com	ME)	TVD Referen MD Reference North Reference	e:	Well #713H kb = 26' @ 347 kb = 26' @ 347 Grid Minimum Curva	6.0usft
Project	Lea County, N	M (NAD 83 NM	1E)				
Geo Datum:	US State Plane North American New Mexico Eas	Datum 1983		System Datun	1:	Mean Sea Level	
Site	Keystone 6 Fe	d Com					
Site Position: From: Position Uncertainty:	Мар	0.0 usft	Northing: Easting: Slot Radius:	798,338	3.00 usft Latitud 3.00 usft Longitu 3/16 "		32° 9' 58.396 N 103° 30' 10.002 W
Well	#713H						
Well Position	+N/-S +E/-W	0.0 usft 0.0 usft	Northing: Easting:		425,086.00 usft 795,820.00 usft	Latitude: Longitude:	32° 9' 57.479 N 103° 30' 39.304 W
Position Uncertainty Grid Convergence:		0.0 usft 0.44 °	Wellhead Elev	/ation:	usft	Ground Level:	3,450.0 usft
Wellbore	ОН						
Magnetics	Model Nar	ne	Sample Date	Declinatio (°)	n	Dip Angle (°)	Field Strength (nT)
	IGR	RF2020	4/10/2023		6.30	59.79	47,275.80887097
Design	Plan #0.1 RT						
Audit Notes: Version:			Phase:	PLAN	Tie On Dep	oth:	0.0
Vertical Section:		(u	rom (TVD) Isft)	+N/-S (usft)	+E/-W (usft)		rection (°)
		(0.0	0.0	0.0	1	72.66
Plan Survey Tool Pro	-	Date 4/10/2	2023				
Depth From (usft)	Depth To (usft)	Survey (Wellbo	ore)	Tool Name	Rema	arks	
1 0.0	20,065.8	Plan #0.1 RT ((OH)	EOG MWD+IFR [·] MWD + IFR1			



Plan Sections

Ian Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,640.0	0.00	0.00	1,640.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,119.5	9.59	74.49	2,117.3	10.7	38.6	2.00	2.00	0.00	74.49	
7,432.2	9.59	74.49	7,355.7	247.3	891.4	0.00	0.00	0.00	0.00	
7,911.7	0.00	0.00	7,833.0	258.0	930.0	2.00	-2.00	0.00	180.00	
12,031.2	0.00	0.00	11,952.5	258.0	930.0	0.00	0.00	0.00	0.00	KOP(Keystone 6 Fed
12,251.7	26.46	180.00	12,165.2	208.0	930.0	12.00	12.00	81.65	180.00	FTP(Keystone 6 Fed
12,781.2	90.00	179.74	12,429.9	-219.4	931.4	12.00	12.00	-0.05	-0.29	
14,887.8	90.00	179.74	12,430.0	-2,326.0	941.0	0.00	0.00	0.00	0.00	Fed Perf 1(Keystone
20,065.8	90.00	179.71	12,430.0	-7,504.0	966.0	0.00	0.00	0.00	-83.83	PBHL(Keystone 6 Fe

Released to Imaging: 7/5/2023 2:52:43 PM



Database:	PEDM	Local Co-ordinate Reference:	Well #713H
Company:	Midland	TVD Reference:	kb = 26' @ 3476.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3476.0usft
Site:	Keystone 6 Fed Com	North Reference:	Grid
Well:	#713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.1 RT		

Planned Survey

		(usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.0 0.00 0.00 0.0	0.0	0.0	0.00	0.00	0.00
100.0 0.00 0.00 100.0 0.0	0.0	0.0	0.00	0.00	0.00
200.0 0.00 0.00 200.0 0.0	0.0	0.0	0.00	0.00	0.00
300.0 0.00 0.00 300.0 0.0	0.0	0.0	0.00	0.00	0.00
400.0 0.00 0.00 400.0 0.0	0.0	0.0	0.00	0.00	0.00
500.0 0.00 0.00 500.0 0.0	0.0	0.0	0.00	0.00	0.00
600.0 0.00 0.00 600.0 0.0	0.0	0.0	0.00	0.00	0.00
			0.00		
700.0 0.00 0.00 700.0 0.0	0.0	0.0		0.00	0.00
800.0 0.00 0.00 800.0 0.0	0.0	0.0	0.00	0.00	0.00
900.0 0.00 0.00 900.0 0.0	0.0	0.0	0.00	0.00	0.00
1,000.0 0.00 0.00 1,000.0 0.0	0.0	0.0	0.00	0.00	0.00
1,100.0 0.00 0.00 1,100.0 0.0	0.0	0.0	0.00	0.00	0.00
1,200.0 0.00 0.00 1,200.0 0.0	0.0	0.0	0.00	0.00	0.00
1,300.0 0.00 0.00 1,300.0 0.0	0.0	0.0	0.00	0.00	0.00
1,400.0 0.00 0.00 1,400.0 0.0	0.0	0.0	0.00	0.00	0.00
1,500.0 0.00 0.00 1,500.0 0.0	0.0	0.0	0.00	0.00	0.00
1,600.0 0.00 0.00 1,600.0 0.0	0.0	0.0	0.00	0.00	0.00
1,640.0 0.00 0.00 1,640.0 0.0	0.0	0.0	0.00	0.00	0.00
1,700.0 1.20 74.49 1,700.0 0.2	0.6	-0.1	2.00	2.00	0.00
1,800.0 3.20 74.49 1,799.9 1.2	4.3	-0.6	2.00	2.00	0.00
1,900.0 5.20 74.49 1,899.6 3.2	11.4	-1.7	2.00	2.00	0.00
2,000.0 7.20 74.49 1,999.1 6.0	21.8	-3.2	2.00	2.00	0.00
2,100.0 9.20 74.49 2,098.0 9.9	35.5	-5.2	2.00	2.00	0.00
2,119.5 9.59 74.49 2,117.3 10.7	38.6	-5.7	2.00	2.00	0.00
2,200.0 9.59 74.49 2,196.6 14.3	51.5	-7.6	0.00	0.00	0.00
2,300.0 9.59 74.49 2,295.2 18.7	67.6	-10.0	0.00	0.00	0.00
2,400.0 9.59 74.49 2,393.8 23.2	83.6	-12.3	0.00	0.00	0.00
2,500.0 9.59 74.49 2,492.4 27.6	99.7	-14.7	0.00	0.00	0.00
2,600.0 9.59 74.49 2,591.0 32.1	115.7	-17.1	0.00	0.00	0.00
2,700.0 9.59 74.49 2,689.7 36.6	131.8	-19.4	0.00	0.00	0.00
2,800.0 9.59 74.49 2,788.3 41.0	147.8	-21.8	0.00	0.00	0.00
2,900.0 9.59 74.49 2,886.9 45.5	163.9	-24.2	0.00	0.00	0.00
3,000.0 9.59 74.49 2,985.5 49.9	179.9	-26.5	0.00	0.00	0.00
3,100.0 9.59 74.49 3,084.1 54.4	196.0	-28.9	0.00	0.00	0.00
3,200.0 9.59 74.49 3,182.7 58.8	212.0	-31.3	0.00	0.00	0.00
3,300.0 9.59 74.49 3,281.3 63.3	228.1	-33.6	0.00	0.00	0.00
3,400.0 9.59 74.49 3,379.9 67.7	244.1	-36.0	0.00	0.00	0.00
3,500.0 9.59 74.49 3,478.5 72.2	260.2	-38.4	0.00	0.00	0.00
3,600.0 9.59 74.49 3,577.1 76.6	276.2	-40.7	0.00	0.00	0.00
3,700.0 9.59 74.49 3,675.7 81.1	292.3	-43.1	0.00	0.00	0.00
3,800.0 9.59 74.49 3,774.3 85.5	308.3	-45.5	0.00	0.00	0.00
3,900.0 9.59 74.49 3,872.9 90.0	324.4	-47.8	0.00	0.00	0.00
4,000.0 9.59 74.49 3,971.5 94.4	340.5	-50.2	0.00	0.00	0.00
4,100.0 9.59 74.49 4,070.1 98.9	356.5	-52.6	0.00	0.00	0.00
4,200.0 9.59 74.49 4,168.7 103.4	372.6	-54.9	0.00	0.00	0.00
4,300.0 9.59 74.49 4,267.3 107.8	388.6	-57.3	0.00	0.00	0.00
4,400.0 9.59 74.49 4,365.9 112.3	404.7	-59.7	0.00	0.00	0.00
4,500.0 9.59 74.49 4,464.5 116.7	420.7	-62.0	0.00	0.00	0.00
4,600.0 9.59 74.49 4,563.1 121.2	436.8	-64.4	0.00	0.00	0.00
4,700.0 9.59 74.49 4,661.7 125.6	452.8	-66.8	0.00	0.00	0.00
4,800.0 9.59 74.49 4,760.3 130.1	468.9	-69.1	0.00	0.00	0.00
4,900.0 9.59 74.49 4,858.9 134.5	484.9	-71.5	0.00	0.00	0.00
5,000.0 9.59 74.49 4,957.5 139.0	501.0	-73.9	0.00	0.00	0.00
5,100.0 9.59 74.49 5,056.1 143.4	517.0	-76.2	0.00	0.00	0.00

4/10/2023 4:12:05PM

COMPASS 5000.16 Build 100



Database:	PEDM	Local Co-ordinate Reference:	Well #713H
Company:	Midland	TVD Reference:	kb = 26' @ 3476.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3476.0usft
Site:	Keystone 6 Fed Com	North Reference:	Grid
Well:	#713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.1 RT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	9.59	74.49	5,154.7	147.9	533.1	-78.6	0.00	0.00	0.00
5,300.0	9.59	74.49	5,253.3	152.3	549.1	-81.0	0.00	0.00	0.00
5,400.0	9.59	74.49	5,351.9	156.8	565.2	-83.3	0.00	0.00	0.00
5,500.0	9.59	74.49	5,450.5	161.2	581.2	-85.7	0.00	0.00	0.00
5,600.0	9.59	74.49	5,549.1	165.7	597.3	-88.1	0.00	0.00	0.00
5,700.0	9.59	74.49	5,647.7	170.2	613.4	-90.5	0.00	0.00	0.00
5,800.0	9.59	74.49	5,746.3	174.6	629.4	-92.8	0.00	0.00	0.00
5,900.0	9.59	74.49	5,844.9	174.0	645.5	-92.0	0.00	0.00	0.00
6,000.0	9.59	74.49	5,943.5	183.5	661.5	-97.6	0.00	0.00	0.00
6,100.0	9.59	74.49	6,042.1	188.0	677.6	-99.9	0.00	0.00	0.00
6,200.0	9.59	74.49	6,140.7	192.4	693.6	-102.3	0.00	0.00	0.00
6,300.0	9.59	74.49	6,239.3	196.9	709.7	-104.7	0.00	0.00	0.00
6,400.0	9.59	74.49	6,337.9	201.3	725.7	-104.7	0.00	0.00	0.00
6,500.0	9.59	74.49	6,436.6	205.8	741.8	-109.4	0.00	0.00	0.00
6,600.0	9.59	74.49	6,535.2	205.8	741.8	-109.4	0.00	0.00	0.00
6,700.0	9.59	74.49	6,633.8	210.2	773.9	-114.1	0.00	0.00	0.00
6,800.0	9.59	74.49	6,732.4	219.1	789.9	-116.5	0.00	0.00	0.00
6,900.0	9.59	74.49	6,831.0	223.6	806.0	-118.9	0.00	0.00	0.00
7,000.0	9.59	74.49	6,929.6	228.0	822.0	-121.2	0.00	0.00	0.00
7,100.0	9.59	74.49	7,028.2	232.5	838.1	-123.6	0.00	0.00	0.00
7,200.0	9.59	74.49	7,126.8	237.0	854.1	-126.0	0.00	0.00	0.00
7,300.0	9.59	74.49	7,225.4	241.4	870.2	-128.3	0.00	0.00	0.00
7,400.0	9.59	74.49	7,324.0	245.9	886.3	-130.7	0.00	0.00	0.00
7,432.2	9.59	74.49	7,355.7	247.3	891.4	-131.5	0.00	0.00	0.00
7,500.0	8.23	74.49	7,422.7	250.1	901.5	-133.0	2.00	-2.00	0.00
7,600.0	6.23	74.49	7,521.9	253.5	913.7	-134.7	2.00	-2.00	0.00
7,700.0	4.23	74.49	7,621.5	255.9	922.5	-136.0	2.00	-2.00	0.00
7,800.0	2.23	74.49	7,721.3	257.4	927.9	-136.8	2.00	-2.00	0.00
7,900.0	0.23	74.49	7,821.3	258.0	930.0	-137.1	2.00	-2.00	0.00
7,911.7	0.00	0.00	7,833.0	258.0	930.0	-137.1	2.00	-2.00	0.00
8,000.0	0.00	0.00	7,921.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,021.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,121.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,221.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,321.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,421.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,521.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,621.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,721.3	258.0	930.0	-137.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,821.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,921.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,100.0	0.00	0.00	9,021.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,021.3	258.0	930.0 930.0	-137.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,221.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,321.3	258.0	930.0 930.0	-137.1	0.00	0.00	0.00
9,500.0	0.00	0.00	9,421.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,600.0	0.00	0.00	9,521.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,700.0	0.00	0.00	9,621.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,800.0	0.00	0.00	9,721.3	258.0	930.0	-137.1	0.00	0.00	0.00
9,900.0 10,000.0	0.00 0.00	0.00 0.00	9,821.3 9,921.3	258.0 258.0	930.0 930.0	-137.1 -137.1	0.00 0.00	0.00 0.00	0.00 0.00
10,100.0	0.00	0.00	10,021.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,200.0	0.00	0.00	10,121.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,300.0	0.00	0.00	10,221.3	258.0	930.0	-137.1	0.00	0.00	0.00

4/10/2023 4:12:05PM

Page 5

COMPASS 5000.16 Build 100

.



Database:	PEDM	Local Co-ordinate Reference:	Well #713H
Company:	Midland	TVD Reference:	kb = 26' @ 3476.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3476.0usft
Site:	Keystone 6 Fed Com	North Reference:	Grid
Well:	#713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400.0	0.00	0.00	10,321.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,500.0	0.00	0.00	10,421.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,600.0	0.00	0.00	10,521.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,700.0	0.00	0.00	10,621.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,800.0	0.00	0.00	10,721.3	258.0	930.0	-137.1	0.00	0.00	0.00
10,900.0	0.00	0.00	10,821.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,000.0	0.00	0.00	10,921.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,100.0	0.00	0.00	11,021.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,200.0	0.00	0.00	11,121.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,300.0	0.00	0.00	11,221.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,400.0	0.00	0.00	11,321.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,500.0	0.00	0.00	11,421.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,600.0	0.00	0.00	11,521.3	258.0	930.0	-137.1	0.00	0.00	0.00
11,700.0	0.00	0.00	11,621.3	258.0	930.0 930.0	-137.1	0.00	0.00	0.00
11,800.0	0.00	0.00	11,721.3	258.0	930.0 930.0	-137.1	0.00	0.00	0.00
11,900.0	0.00	0.00	11,721.3	258.0 258.0	930.0 930.0	-137.1	0.00	0.00	0.00
12,000.0	0.00	0.00	11,921.3	258.0	930.0 930.0	-137.1	0.00	0.00	0.00
12,031.2	0.00	0.00	11,952.5	258.0	930.0	-137.1	0.00	0.00	0.00
12,051.2	2.25	180.00	11,952.5	256.0 257.6	930.0 930.0	-137.1	12.00	12.00	0.00
12,050.0	5.26	180.00	11,996.2	256.0	930.0 930.0	-130.8	12.00	12.00	0.00
12,100.0	8.26	180.00	12,021.1	253.1	930.0	-132.2	12.00	12.00	0.00
12,125.0	11.26	180.00	12,045.7	248.8	930.0	-128.0	12.00	12.00	0.00
	14.26	180.00	12,070.1	243.3	930.0	-122.6	12.00	12.00	0.00
12,150.0 12,175.0	14.20	180.00	12,070.1	243.3 236.5	930.0 930.0	-122.6	12.00	12.00	0.00
12,200.0	20.26	180.00	12,094.1	228.5	930.0 930.0	-107.9	12.00	12.00	0.00
12,200.0	23.26	180.00	12,141.0	219.2	930.0	-98.7	12.00	12.00	0.00
12,220.0	26.46	180.00	12,165.2	208.0	930.0	-87.6	12.00	12.00	0.00
12,275.0	29.26	179.97	12,185.8	197.1	930.0	-76.7	12.00	12.00	-0.13
12,300.0	32.26	179.94	12,207.3	184.3	930.0 930.0	-64.1	12.00	12.00	-0.10
12,325.0	35.26	179.92	12,228.1	170.4	930.0	-50.3	12.00	12.00	-0.09
12,350.0	38.26	179.90	12,248.1	155.5	930.1	-35.4	12.00	12.00	-0.08
12,375.0	41.26	179.89	12,267.3	139.5	930.1	-19.6	12.00	12.00	-0.07
12,400.0	44.26	179.87	12,285.7	122.5	930.1	-2.7	12.00	12.00	-0.06
12,400.0	44.20	179.87	12,205.7	122.5	930.1 930.2	-2.7	12.00	12.00	-0.08
12,420.0	50.26	179.85	12,319.6	85.8	930.2	33.7	12.00	12.00	-0.05
12,475.0	53.26	179.84	12,335.1	66.2	930.3	53.1	12.00	12.00	-0.04
12,500.0	56.26	179.82	12,349.5	45.8	930.3	73.4	12.00	12.00	-0.04
12,525.0	59.26	179.82	12,362.8	24.6	930.4	94.4	12.00	12.00	-0.04
12,525.0	62.26	179.82	12,302.0	24.6	930.4 930.5	94.4 116.0	12.00	12.00	-0.04
12,550.0	65.26	179.80	12,386.1	-19.6	930.5 930.5	138.3	12.00	12.00	-0.04
12,600.0	68.26	179.79	12,396.0	-42.6	930.5 930.6	161.1	12.00	12.00	-0.03
12,625.0	71.26	179.78	12,404.6	-66.0	930.7	184.3	12.00	12.00	-0.03
12,650.0	74.26	179.77	12,412.0	-89.9	930.8	208.0	12.00	12.00	-0.03
12,650.0	74.26	179.77	12,412.0	-89.9 -114.1	930.8 930.9	208.0	12.00	12.00	-0.03
12,700.0	80.26	179.76	12,410.2	-114.1	930.9 931.0	256.4	12.00	12.00	-0.03
12,725.0	83.26	179.75	12,426.6	-163.4	931.0	280.9	12.00	12.00	-0.03
12,750.0	86.26	179.75	12,428.9	-188.3	931.2	305.6	12.00	12.00	-0.03
12,775.0	89.26	179.74	12,429.9	-213.3	931.3	330.4	12.00	12.00	-0.03
12,781.2	90.00	179.74	12,429.9	-219.4	931.3	336.6	12.00	12.00	-0.03
12,800.0	90.00	179.74	12,429.9	-238.3	931.4	355.2	0.00	0.00	0.00
12,900.0	90.00	179.74	12,429.9	-338.3	931.9	454.5	0.00	0.00	0.00
13,000.0	90.00	179.74	12,429.9	-438.3	932.4	553.7	0.00	0.00	0.00
13,100.0	90.00	179.74	12,430.0	-538.3	932.8	653.0	0.00	0.00	0.00
13,100.0	90.00 90.00	179.74	12,430.0	-538.3 -638.3	932.8 933.3	653.0 752.2	0.00	0.00	
1.3 200.0					M. n. n. n	/5//	()()()	()()()	0.00

4/10/2023 4:12:05PM

Page 6

COMPASS 5000.16 Build 100

.



Database:	PEDM	Local Co-ordinate Reference:	Well #713H
Company:	Midland	TVD Reference:	kb = 26' @ 3476.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3476.0usft
Site:	Keystone 6 Fed Com	North Reference:	Grid
Well:	#713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,300.0	90.00	179.74	12,430.0	-738.3	933.7	851.4	0.00	0.00	0.00
13,400.0	90.00	179.74	12,430.0	-838.3	934.2	950.7	0.00	0.00	0.00
13,500.0	90.00	179.74	12,430.0	-938.3	934.6	1,049.9	0.00	0.00	0.00
13,600.0	90.00	179.74	12,430.0	-1,038.3	935.1	1,149.2	0.00	0.00	0.00
13,700.0	90.00	179.74	12,430.0	-1,138.3	935.6	1,248.4	0.00	0.00	0.00
13,800.0	90.00	179.74	12,430.0	-1,238.3	936.0	1,347.6	0.00	0.00	0.00
13,900.0	90.00	179.74	12,430.0	-1,338.3	936.5	1,446.9	0.00	0.00	0.00
14,000.0	90.00	179.74	12,430.0	-1,438.3	936.9	1,546.1	0.00	0.00	0.00
14,100.0	90.00	179.74	12,430.0	-1,538.3	937.4	1,645.3	0.00	0.00	0.00
14,200.0	90.00	179.74	12,430.0	-1,638.3	937.9	1,744.6	0.00	0.00	0.00
14,300.0	90.00	179.74	12,430.0	-1,738.3	938.3	1,843.8	0.00	0.00	0.00
14,400.0	90.00	179.74	12,430.0	-1,838.3	938.8	1,943.1	0.00	0.00	0.00
14,500.0	90.00	179.74	12,430.0	-1,938.3	939.2	2,042.3	0.00	0.00	0.00
14,600.0	90.00	179.74	12,430.0	-2,038.2	939.7	2,141.5	0.00	0.00	0.00
14,700.0	90.00	179.74	12,430.0	-2,138.2	940.1	2,240.8	0.00	0.00	0.00
14,800.0	90.00	179.74	12,430.0	-2,238.2	940.6	2,340.0	0.00	0.00	0.00
14,887.8	90.00	179.74	12,430.0	-2,326.0	941.0	2,427.1	0.00	0.00	0.00
14,900.0	90.00	179.74	12,430.0	-2,338.2	941.1	2,439.3	0.00	0.00	0.00
15,000.0	90.00	179.74	12,430.0	-2,438.2	941.5	2,538.5	0.00	0.00	0.00
15,100.0	90.00	179.74	12,430.0	-2,538.2	942.0	2,637.7	0.00	0.00	0.00
15,200.0	90.00	179.74	12,430.0	-2,638.2	942.4	2,737.0	0.00	0.00	0.00
15,300.0	90.00	179.74	12,430.0	-2,738.2	942.9	2,836.2	0.00	0.00	0.00
15,400.0	90.00	179.73	12,430.0	-2,838.2	943.4	2,935.5	0.00	0.00	0.00
15,500.0	90.00	179.73	12,430.0	-2,938.2	943.8	3,034.7	0.00	0.00	0.00
15,600.0	90.00	179.73	12,430.0	-3,038.2	944.3	3,133.9	0.00	0.00	0.00
15,700.0	90.00	179.73	12,430.0	-3,138.2	944.8	3,233.2	0.00	0.00	0.00
15,800.0	90.00	179.73	12,430.0	-3,238.2	945.2	3,332.4	0.00	0.00	0.00
15,900.0	90.00	179.73	12,430.0	-3,338.2	945.7	3,431.7	0.00	0.00	0.00
16,000.0	90.00	179.73	12,430.0	-3,438.2	946.2	3,530.9	0.00	0.00	0.00
16,100.0	90.00	179.73	12,430.0	-3,538.2	946.6	3,630.1	0.00	0.00	0.00
16,200.0	90.00	179.73	12,430.0	-3,638.2	947.1	3,729.4	0.00	0.00	0.00
16,300.0	90.00	179.73	12,430.0	-3,738.2	947.6	3,828.6	0.00	0.00	0.00
16,400.0	90.00	179.73	12,430.0	-3,838.2	948.0	3,927.9	0.00	0.00	0.00
16,500.0	90.00	179.73	12,430.0	-3,938.2	948.5	4,027.1	0.00	0.00	0.00
16,600.0	90.00	179.73	12,430.0	-4,038.2	949.0	4,126.3	0.00	0.00	0.00
16,700.0	90.00	179.73	12,430.0	-4,138.2	949.5	4,225.6	0.00	0.00	0.00
16,800.0	90.00	179.73	12,430.0	-4,238.2	949.9	4,324.8	0.00	0.00	0.00
16,900.0	90.00	179.73	12,430.0	-4,338.2	950.4	4,424.1	0.00	0.00	0.00
17,000.0	90.00	179.73	12,430.0	-4,438.2	950.9	4,523.3	0.00	0.00	0.00
17,100.0	90.00	179.73	12,430.0	-4,538.2	951.4	4,622.5	0.00	0.00	0.00
17,200.0	90.00	179.72	12,430.0	-4,638.2	951.8	4,721.8	0.00	0.00	0.00
17,300.0	90.00	179.72	12,430.0	-4,738.2	952.3	4,821.0	0.00	0.00	0.00
17,400.0	90.00	179.72	12,430.0	-4,838.2	952.8	4,920.3	0.00	0.00	0.00
17,500.0	90.00	179.72	12,430.0	-4,938.2	953.3	5,019.5	0.00	0.00	0.00
17,600.0	90.00	179.72	12,430.0	-5,038.2	953.8	5,118.8	0.00	0.00	0.00
17,700.0	90.00	179.72	12,430.0	-5,138.2	954.3	5,218.0	0.00	0.00	0.00
17,800.0	90.00	179.72	12,430.0	-5,238.2	954.7	5,317.2	0.00	0.00	0.00
17,900.0	90.00	179.72	12,430.0	-5,338.2	955.2	5,416.5	0.00	0.00	0.00
18,000.0	90.00	179.72	12,430.0	-5,438.2	955.7	5,515.7	0.00	0.00	0.00
18,100.0	90.00	179.72	12,430.0	-5,538.2	956.2	5,615.0	0.00	0.00	0.00
18,200.0	90.00	179.72	12,430.0	-5,638.2	956.7	5,714.2	0.00	0.00	0.00
18,300.0	90.00	179.72	12,430.0	-5,738.2	957.2	5,813.5	0.00	0.00	0.00
18,400.0	90.00	179.72	12,430.0	-5,838.2	957.7	5,912.7	0.00	0.00	0.00
18,500.0	90.00	179.72	12,430.0	-5,938.2	958.2	6,011.9	0.00	0.00	0.00

4/10/2023 4:12:05PM

Page 7

COMPASS 5000.16 Build 100

.



Database:	PEDM	Local Co-ordinate Reference:	Well #713H
Company:	Midland	TVD Reference:	kb = 26' @ 3476.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3476.0usft
Site:	Keystone 6 Fed Com	North Reference:	Grid
Well:	#713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,600.0	90.00	179.72	12,430.0	-6,038.2	958.7	6,111.2	0.00	0.00	0.00
18,700.0	90.00	179.72	12,430.0	-6,138.2	959.2	6,210.4	0.00	0.00	0.00
18,800.0	90.00	179.72	12,430.0	-6,238.2	959.7	6,309.7	0.00	0.00	0.00
18,900.0	90.00	179.72	12,430.0	-6,338.2	960.1	6,408.9	0.00	0.00	0.00
19,000.0	90.00	179.71	12,430.0	-6,438.2	960.6	6,508.2	0.00	0.00	0.00
19,100.0	90.00	179.71	12,430.0	-6,538.2	961.1	6,607.4	0.00	0.00	0.00
19,200.0	90.00	179.71	12,430.0	-6,638.2	961.6	6,706.6	0.00	0.00	0.00
19,300.0	90.00	179.71	12,430.0	-6,738.2	962.1	6,805.9	0.00	0.00	0.00
19,400.0	90.00	179.71	12,430.0	-6,838.2	962.6	6,905.1	0.00	0.00	0.00
19,500.0	90.00	179.71	12,430.0	-6,938.2	963.1	7,004.4	0.00	0.00	0.00
19,600.0	90.00	179.71	12,430.0	-7,038.2	963.6	7,103.6	0.00	0.00	0.00
19,700.0	90.00	179.71	12,430.0	-7,138.2	964.1	7,202.9	0.00	0.00	0.00
19,800.0	90.00	179.71	12,430.0	-7,238.2	964.7	7,302.1	0.00	0.00	0.00
19,900.0	90.00	179.71	12,430.0	-7,338.2	965.2	7,401.4	0.00	0.00	0.00
20,000.0	90.00	179.71	12,430.0	-7,438.2	965.7	7,500.6	0.00	0.00	0.00
20,065.8	90.00	179.71	12,430.0	-7,504.0	966.0	7,565.9	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Keystone 6 Fed Cc - plan hits target cent - Point	0.00 er	0.00	11,952.5	258.0	930.0	425,344.00	796,750.00	32° 9' 59.962 N	103° 30' 28.463 W
FTP(Keystone 6 Fed Co - plan hits target cent - Point	0.00 ter	0.00	12,165.2	208.0	930.0	425,294.00	796,750.00	32° 9' 59.467 N	103° 30' 28.467 W
PBHL(Keystone 6 Fed C - plan hits target cent - Point	0.00 ter	0.00	12,430.0	-7,504.0	966.0	417,582.00	796,786.00	32° 8' 43.153 N	103° 30' 28.736 W
Fed Perf 1(Keystone 6 F - plan hits target cent - Point	0.00 ter	0.00	12,430.0	-2,326.0	941.0	422,760.00	796,761.00	32° 9' 34.392 N	103° 30' 28.565 W

Released to Imaging: 7/5/2023 2:52:43 PM

leog resources

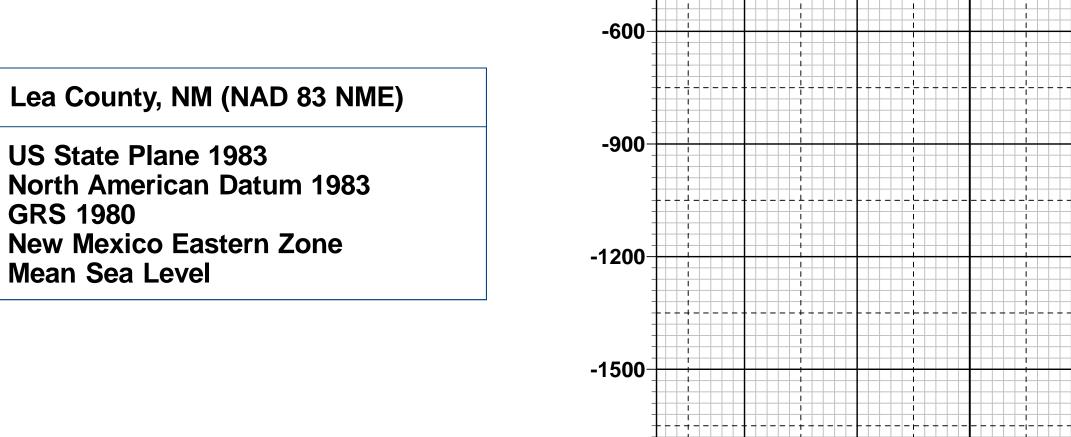
Ν

Lea County, NM (NAD 83 NME)

Keystone 6 Fed Com #713H

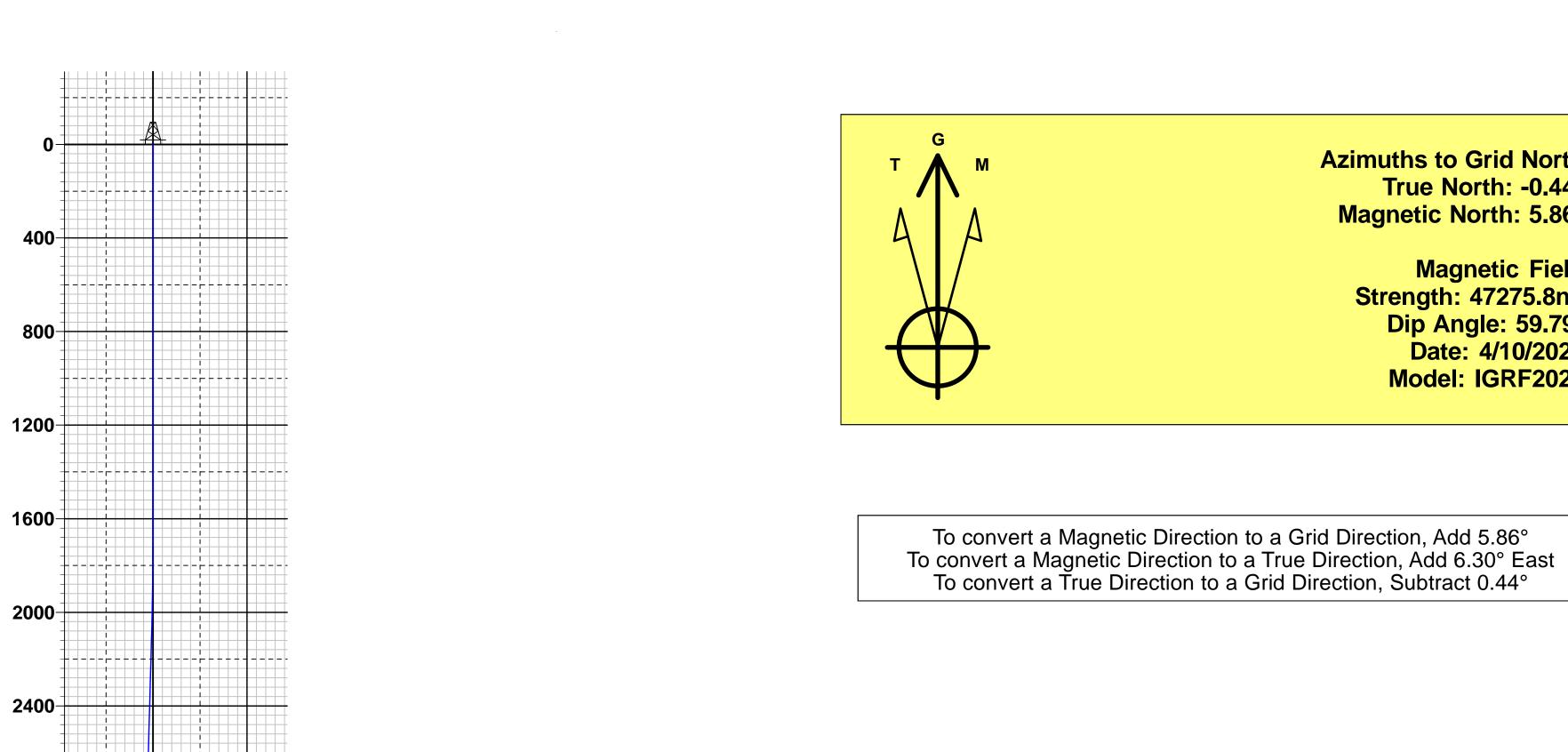
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: New Mexico Eastern Zone System Datum: Mean Sea Level

300-**Plan #0.1 RT** -300 -600 PROJECT DETAILS: Lea County, NM (NAD 83 NME)



-600

-300



eived by OCD: 5/23/2023 7:42:52 AM

2800-

3200-

3600

4000

4400-

4800-

5200

5600-

Depth 0009 Depth

6400

6800-

7200

7600

8000-

8400

8800

9200-

9600

10000

10400

10800

11200

- - - - - - - <mark>-</mark> -

- - - - - - - -

- - - - - - -

- - - - - -

- - -

1800

1200

- - - - - - - - -

+ - - - - - - +

1500

900

							WELL	DETAILS:	#713H		
									3450.	0	
						:hing)86.00	Eas	kb = 26' @ sting 320.00	Latittude 32° 9' 57.479 N	Longitude 103° 30' 39.304 W	
											-
						S	SECTION	I DETAILS			
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	1640.0	0.00	0.00	1640.0	0.0	0.0	0.00	0.00	0.0		
3	2119.5	9.59	74.49	2117.3	10.7	38.6	2.00	74.49	-5.7		
4	7432.2	9.59	74.49	7355.7	247.3	891.4	0.00	0.00	-131.5		
5	7911.7	0.00	0.00	7833.0	258.0	930.0	2.00	180.00	-137.1		
6	12031.2	0.00	0.00	11952.5	258.0	930.0	0.00	0.00	-137.1	KOP(Keystone 6 F	ed Com #713H)
7	12251.7	26.46	180.00	12165.2	208.0	930.0	12.00	180.00	-87.6	FTP(Keystone 6 Fe	ed Com #713H)
8	12781.2	90.00	179.74	12429.9	-219.4	931.4	12.00	-0.29	336.6		
9	14887.8	90.00	179.74	12430.0	-2326.0	941.0	0.00	0.00	2427.1	Fed Perf 1(Keystor	ne 6 Fed Com #713H)
10	20065.8	90.00	179.71	12430.0	-7504.0	966.0	0.00	-83.83	7565.9	PBHL(Keystone 6	Fed Com #713H)

Azimuths to Grid North

Magnetic North: 5.86°

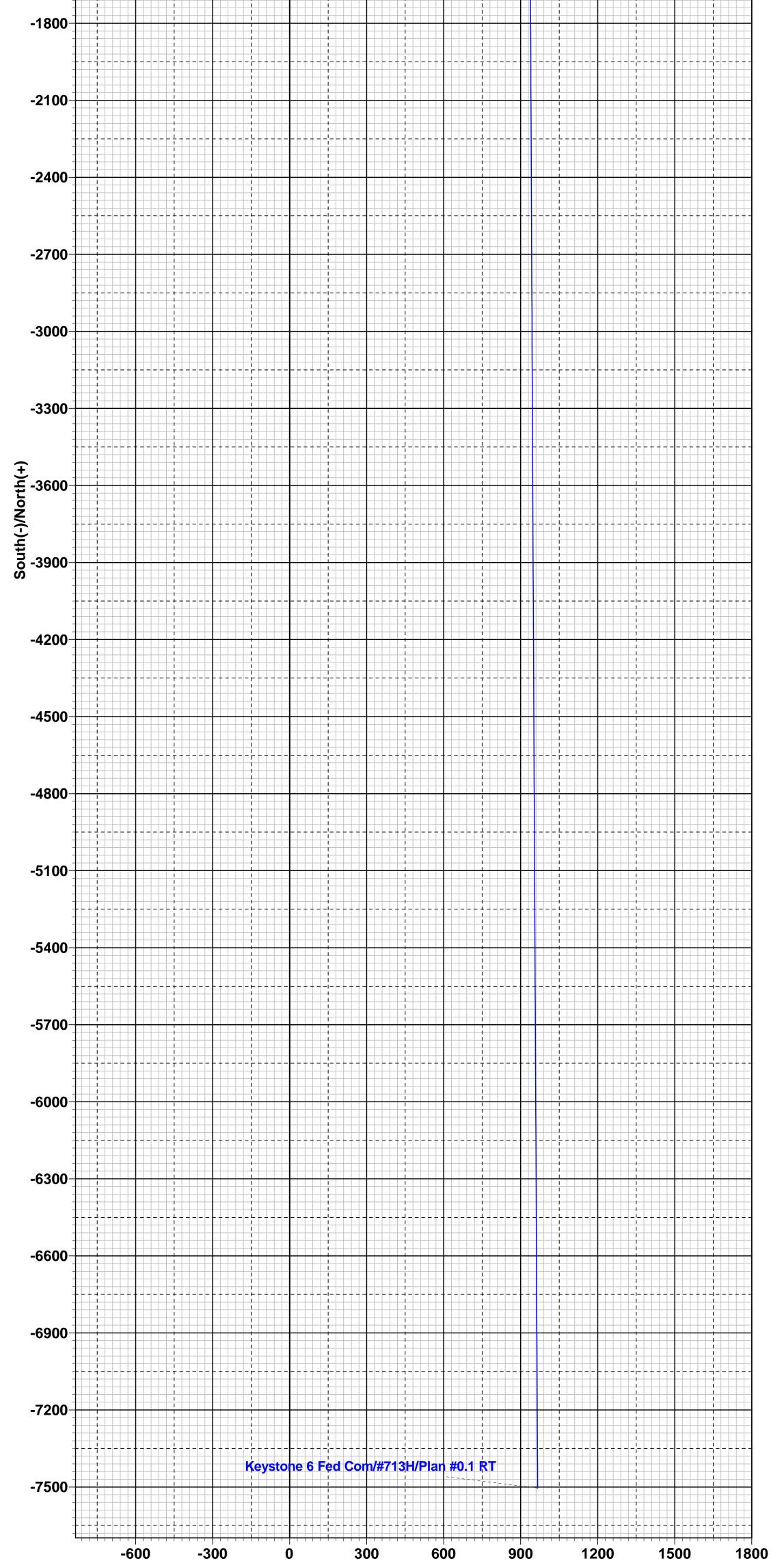
Strength: 47275.8nT

Dip Angle: 59.79° Date: 4/10/2023

Model: IGRF2020

True North: -0.44°

Magnetic Field



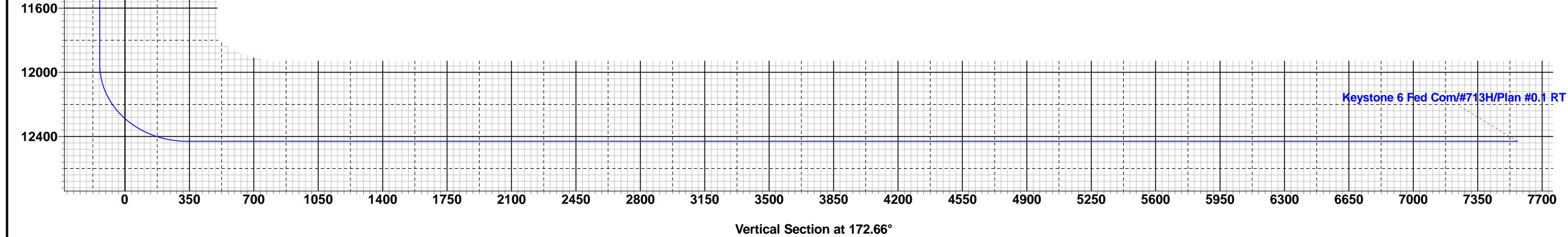
West(-)/East(+)

600

300

No casing data is available Name KOP(Keystone 6 Fed Com #713H) FPd Perf 1(Keystone 6 Fed Com #713H) Ped Perf 1(Keystone 6 Fed Com #713H) TVD 12430.0 +N/-S 258.0 \$30.0 422240.00 425294.00 796780.00 796780.00 -5400 -6000 -6700				(MAP CO-ORD					
	No casing data is available	KOP(Keystone 6 Fed Com #713H) FTP(Keystone 6 Fed Com #713H)	11952.5 12165.2 12430.0	258.0 208.0 -2326.0	930.0 930.0 941.0	425344.00 425294.00 422760.00	796750.00 796750.00 796761.00	-5400	1
		PBRL(Reystone 6 red Com #713R)	12430.0	-7304.0	900.0	417362.00	790700.00		
-6900									
-7200								-6900	
-7500								-7200	

West(-)/East(+)



Lea County, NM (NAD 83 NME) Keystone 6 Fed Com #713H OH Plan #0.1 RT 16:12, April 10 2023

Released to Imaging: 7/5/2023 2:52:43 PM

Seog resources Offline Intermediate Cementing Procedure

Cement Program

1. No changes to the cement program will take place for offline cementing.

Summarized Operational Procedure for Intermediate Casing

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment back pressure valves.
 - a. Float equipment is equipped with two back pressure valves rated to a minimum of 5,000 psi.
- 2. Land production casing on mandrel hanger through BOP.
 - a. If casing is unable to be landed with a mandrel hanger, then the **casing will be cemented online**.
- 3. Break circulation and confirm no restrictions.
 - a. Ensure no blockage of float equipment and appropriate annular returns.
 - b. Perform flow check to confirm well is static.
- 4. Set pack-off
 - a. If utilizing a fluted/ported mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid, remove landing joint, and set annular packoff through BOP. Pressure test to 5,000 psi for 10 min.
 - b. If utilizing a solid mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid. Pressure test seals to 5,000 psi for 10 min. Remove landing joint through BOP.
- 5. After confirmation of both annular barriers and the two casing barriers, install TA plug and pressure test to 5,000 psi for 10 min. Notify the BLM with intent to proceed with nipple down and offline cementing.
 - a. Minimum 4 hrs notice.
- 6. With the well secured and BLM notified, nipple down BOP and secure on hydraulic carrier or cradle.
 - a. Note, if any of the barriers fail to test, the BOP stack will not be nippled down until after the cement job has concluded and both lead and tail slurry have reached 500 psi.
- 7. Skid/Walk rig off current well.
- 8. Confirm well is static before removing TA Plug.
 - a. Cementing operations will not proceed until well is under control. (If well is not static, notify BLM and proceed to kill)
 - b. Casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing.
 - c. Well control plan can be seen in Section B, Well Control Procedures.
 - d. If need be, rig can be moved back over well and BOP nippled back up for any further remediation.

Page | 1

Page 23 of 30

2/24/2022

Seog resources

Offline Intermediate Cementing Procedure

- e. Diagram for rig positioning relative to offline cementing can be seen in Figure 4.
- 9. Rig up return lines to take returns from wellhead to pits and rig choke.
 - a. Test all connections and lines from wellhead to choke manifold to 5,000 psi high for 10 min.
 - b. If either test fails, perform corrections and retest before proceeding.
 - c. Return line schematics can be seen in Figure 3.
- 10. Remove TA Plug from the casing.
- 11. Install offline cement tool.
 - a. Current offline cement tool schematics can be seen in Figure 1 (Cameron) and Figure 2 (Cactus).
- 12. Rig up cement head and cementing lines.
 - a. Pressure test cement lines against cement head to 80% of casing burst for 10 min.
- 13. Break circulation on well to confirm no restrictions.
 - a. If gas is present on circulation, well will be shut in and returns rerouted through gas buster.
 - b. Max anticipated time before circulating with cement truck is 6 hrs.
- 14. Pump cement job as per plan.
 - a. At plug bump, test casing to 0.22 psi/ft or 1500 psi, whichever is greater.
 - b. If plug does not bump on calculated, shut down and wait 8 hrs or 500 psi compressive strength, whichever is greater before testing casing.
- 15. Confirm well is static and floats are holding after cement job.
 - a. With floats holding and backside static:
 - i. Remove cement head.
 - b. If floats are leaking:
 - i. Shut-in well and WOC (Wait on Cement) until tail slurry reaches 500 psi compressive strength and the casing is static prior to removing cement head.
 - c. If there is flow on the backside:
 - i. Shut in well and WOC until tail slurry reaches 500 psi compressive strength. Ensure that the casing is static prior to removing cement head.
- 16. Remove offline cement tool.
- 17. Install night cap with pressure gauge for monitoring.
- 18. Test night cap to 5,000 psi for 10 min.

Example Well Control Plan Content

A. Well Control Component Table

The table below, which covers the cementing of the <u>5M MASP (Maximum Allowable Surface Pressure) portion of the well</u>, outlines the well control component rating in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nippled up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2" 1502 Lo-Torque Valves	15M

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 circulating and cementing through the Offline Cement Adapter.

General Procedure While Circulating

- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.

Page | 3

2/24/2022

Seog resources

Offline Intermediate Cementing Procedure

- 6. Read and record the following:
 - a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
 - b. Pit gain
 - c. Time
 - d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

General Procedure While Cementing

- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.
- 6. Open rig choke and begin pumping again taking returns through choke manifold and mud/gas separator.
- 7. Continue to place cement until plug bumps.
- 8. At plug bump close rig choke and cement head.
- 9. Read and record the following
 - a. SICP and AP
 - b. Pit gain
 - c. Time
 - d. Shut-in annulus valves on wellhead

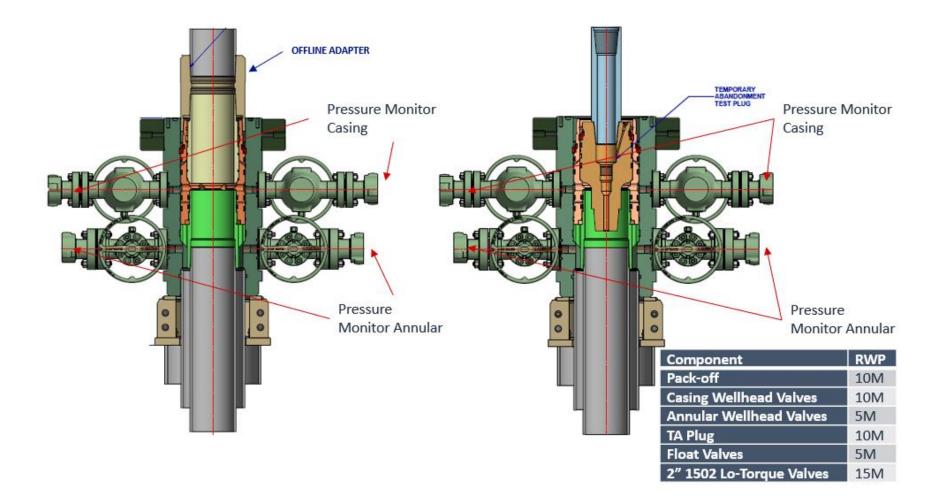
General Procedure After Cementing

- 1. Sound alarm (alert crew).
- 2. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig 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 and AP
 - b. Pit gain
 - c. Time
 - d. Shut-in annulus valves on wellhead

Page | 4

Seog resources Offline Intermediate Cementing Procedure

Figure 1: Cameron TA Plug and Offline Adapter Schematic



2/24/2022

leog resources Offline Intermediate Cementing Procedure



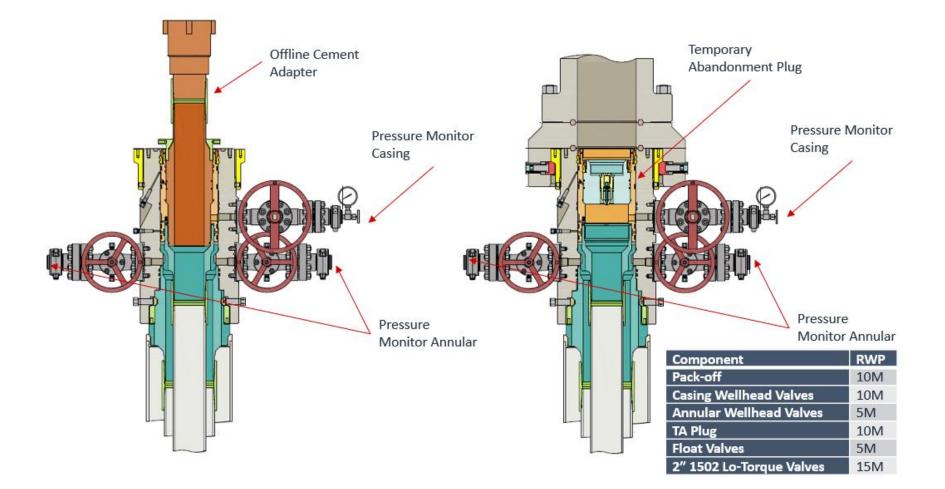


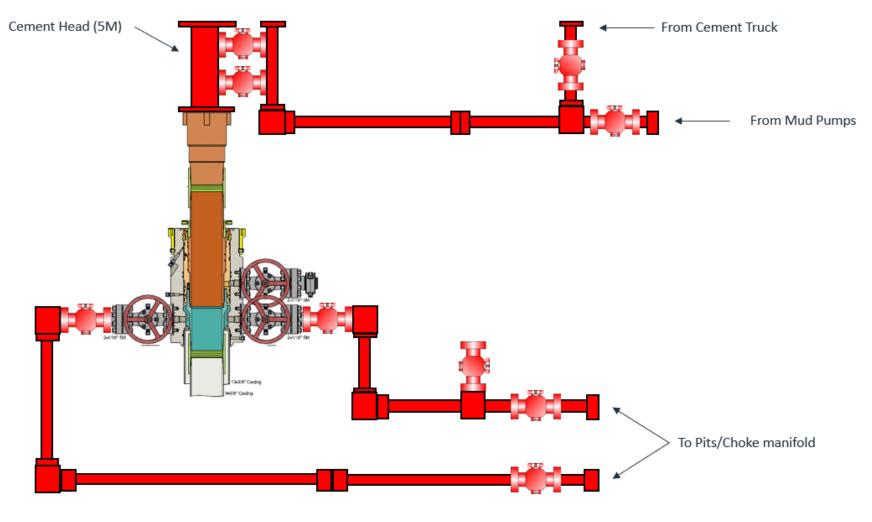
Figure 2: Cactus TA Plug and Offline Adapter Schematic

2/24/2022

2/24/2022

Seog resources Offline Intermediate Cementing Procedure





*** All Lines 10M rated working pressure

Page | 7





2/24/2022

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	219577
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	None	7/5/2023

CONDITIONS

Page 30 of 30

Action 219577