Form 3160-5
(June 2015)

Rec'd 12/02/2020 - NMOCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM107369

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM137168A

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
CICADA UNIT 33H

2. Name of Operator
CHEVRON USA INCORPORATED
Contact: LAURA BECERRA
E-Mail: LBECERRA@CHEVRON.COM

9. API Well No.
30-015-46342-00-X1

3a. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)
Ph: 432-687-7665

10. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 26 T25S R27E SWSE 334FSL 2238FEL
32.094887 N Lat, 104.159302 W Lon

11. County or Parish, State
EDDY COUNTY, NM

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

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

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

Chevron USA Inc respectfully requests the following changes to the original APD approved 1/22/2019:

FTP - From: 100' FNL, 2,010' FWL to 25' FNL, 330' FWL
LTP - From: 100' FSL, 2,010' FWL to 150' FSL, 330' FWL
BHL - From: 25' FSL, 2,010' FWL to 25' FSL, 330' FWL

MD/TVD - From: 21,057'/9,812' to 20,688'/9,169'

Copy of the revised certified plat and drilling plan with updated casing and cement details is attached.

Entered - KMS NMOCD

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #536203 verified by the BLM Well Information System
For CHEVRON USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/03/2020 (21PP0432SE)

Name *(Printed/Typed)* LAURA BECERRA — Title SR REGULATORY AFFAIRS COORD

Signature (Electronic Submission) — Date 11/02/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By NDUNGU KAMAU — Title PETROLEUM ENGINEER — Date 11/30/2020

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

Office Carlsbad

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

(Instructions on page 2)

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

Revisions to Operator-Submitted EC Data for Sundry Notice #536203

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM107369	NMNM107369
Agreement:	NMNM137168A	NMNM137168A (NMNM137168A)
Operator:	CHEVRON USA INC 6301 DEAUVILLE BLVD MIDLAND, TX 79706 Ph: 432-687-7665	CHEVRON USA INCORPORATED 6301 DEAUVILLE BLVD MIDLAND, TX 79706 Ph: 432 687 7100
Admin Contact:	LAURA BECERRA SR REGULATORY AFFAIRS COORD E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665	LAURA BECERRA SR REGULATORY AFFAIRS COORD E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665
Tech Contact:	LAURA BECERRA SR REGULATORY AFFAIRS COORD E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665	LAURA BECERRA SR REGULATORY AFFAIRS COORD E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665
Location: State: County:	 NM EDDY	 NM EDDY
Field/Pool:	WOLFCAMP (GAS)	PURPLE SAGE-WOLFCAMP (GAS)
Well/Facility:	CICADA UNIT 33H Sec 26 T25S R27E Mer NMP SWSE 334FSL 2238FEL	CICADA UNIT 33H Sec 26 T25S R27E SWSE 334FSL 2238FEL 32.094887 N Lat, 104.159302 W Lon

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Chevron USA Incorporated
LEASE NO.:	NMNM107369
LOCATION:	Section 26, T.25 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Cicada Unit 33H
SURFACE HOLE FOOTAGE:	334'/S & 2238'/E
BOTTOM HOLE FOOTAGE	25'/S & 330'/W

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	○ Medium	◉ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	○ Multibowl	◉ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☑ Unit

ALL PREVIOUS COAs STILL APPLY.

A. CASING

Primary Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **450** 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 **8 hours** 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 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.

❖ In **High Cave/Karst Areas** if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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

Option 1 (Single Stage):

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

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

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

- Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

NMK11302020

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

[X] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-46342	98220	PURPLE SAGE WOLFCAMP (GAS)

[4] Property Code	[5] Property Name	[6] Well Number
325142	CICADA UNIT	033H

[7] OGRID No.	[8] Operator Name	[9] Elevation
4323	CHEVRON U.S.A. INC.	3125'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	26	25 SOUTH	27 EAST, N.M.P.M.		334'	SOUTH	2238'	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	2	26 SOUTH	27 EAST, N.M.P.M.		25'	SOUTH	330'	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			R-20858

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.

[16]

PROPOSED FIRST TAKE POINT	
X=	551,366'
Y=	397,754'
LAT.	32.093433° N
LONG.	104.167467° W
NAD 27	
X=	592,549'
Y=	397,811'
LAT.	32.093555° N
LONG.	104.167959° W
NAD83/86	

PROPOSED MID POINT	
X=	551,213'
Y=	392,447'
LAT.	32.078845° N
LONG.	104.167986° W
NAD 27	
X=	592,397'
Y=	392,505'
LAT.	32.078967° N
LONG.	104.168478° W
NAD83/86	

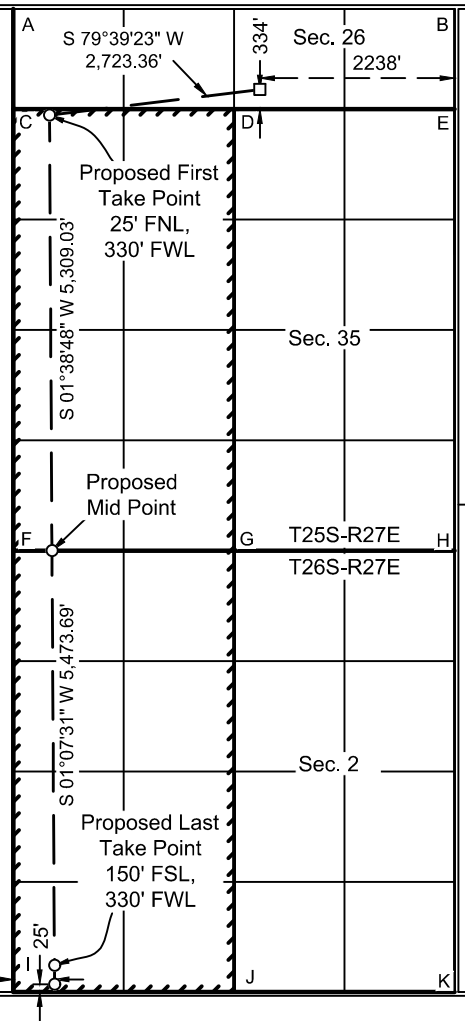
PROPOSED LAST TAKE POINT	
X=	551,108'
Y=	387,100'
LAT.	32.064145° N
LONG.	104.168351° W
NAD 27	
X=	592,292'
Y=	387,157'
LAT.	32.064268° N
LONG.	104.168843° W
NAD83/86	

CICADA UNIT NO. 033H WELL	
X=	554,045'
Y=	398,243'
LAT.	32.094766° N
LONG.	104.158813° W
NAD 27	
X=	595,229'
Y=	398,301'
LAT.	32.094888° N
LONG.	104.159305° W
NAD83/86	
ELEVATION +3125' NAVD 88	

CORNER COORDINATES TABLE (NAD 27)

A - Y=403066.35, X=550914.53
B - Y=403046.49, X=556180.10
C - Y=397757.44, X=551035.56
D - Y=397933.25, X=553702.88
E - Y=397744.31, X=556293.47
F - Y=392448.13, X=550882.93
G - Y=392441.43, X=553545.42
H - Y=392443.13, X=556198.44
I - Y=386937.82, X=550774.76
J - Y=387033.94, X=553461.53
K - Y=387127.27, X=556148.39

PROPOSED BOTTOM HOLE LOCATION	
X=	551,106'
Y=	386,975'
LAT.	32.063801° N
LONG.	104.168360° W
NAD 27	
X=	592,289'
Y=	387,032'
LAT.	32.063924° N
LONG.	104.168852° W
NAD83/86	



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 10/29/2020

Laura Becerra
Printed Name

LBecerra@Chevron.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

01/22/2020
Date of Survey

Signature and Seal of Professional Surveyor:

STEVEN M. COLEMAN
NEW MEXICO
22921
PROFESSIONAL SURVEYOR

10/26/2020

Certificate Number

Pad Summary: Package 10

The table below lists all the wells for the given pad and their respective name and TVD's (ft) for their production target intervals:

Well Name(s)	Target TVD	Formation Desc.
Cicada Unit 33H	9,169	WCA_TGT1
Cicada Unit 34H	9,183	WCA_TGT1
Cicada Unit 35H	9,198	WCA_TGT1
Cicada Unit 36H	9,212	WCA_TGT1

1. **FORMATION TOPS**

The estimated tops of important geologic markers are as follows:
Elevation: 3154 ft

FORMATION	SUB-SEA TVD	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION
Rustler (RSLR)				Alluvium	N/A	
Salado (SLDO) / Castile (CSTL)	2245	909	948	Anhydrite and salt	N/A	
Lamar Lime (LMAR)	850	2,304	2,323	LS, Sh	N/A	
Bell Canyon (BLCN)	824	2,330	2,349	SS, LS	N/A	
Cherry Canyon (CRCN)	-17	3,171	3,193	SS, Silt, LS	N/A	
Brushy Canyon (BRSC)	-1122	4,276	4,304	SS, LS, Sh	N/A	
Bone Spring (BSGL)	-2817	5,971	6,100	Sh, SiltS	Oil	
Avalon (AVLN)	-2858	6,012	6,233	Sh	Oil	
1st Bone Spring (FBSG)	-3650	6,804	7,063	SS, Sh	Oil	
2nd Bone Spring (SBSG)	-4206	7,360	7,646	SS, Sh	Oil	
3rd BS Carb	-5324	8,478	8,819	LS	Oil	
3rd Bone Spring (TBSG)	-5465	8,619	8,965	SS, LS, Sh	Oil	
Wolfcamp (WFMP) A	-5830	8,984	9,375	Sh,LS, SS	Oil	
WCA1	-5931	9,085	9,526	Sh,LS, SS	Oil	
WCA_TGT1	-6060	9,214	**20,688**	Sh,LS, SS	Oil	yes

WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
SHL	3154	-	
KOP	-5517	8,671	9,021
FTP	-6041	9,195	9,897
LTP	-6015	9,169	20,563

2. **ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expected Base of Fresh Water		300
Water	Rustler (RSLR)	700
Oil/Gas	Bone Spring (BSGL)	5,971
Oil/Gas	3rd BS Carb	8,478
Oil/Gas	3rd Bone Spring (TBSG)	8,619
Oil/Gas	Wolfcamp (WFMP) A	8,984

All shows of fresh water and minerals will be reported and protected.

3. **BOP EQUIPMENT**

Chevron will have a minimum of a 5,000 psi rig stack (see proposed schematic) for drill out below surface casing. The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test will be conducted by a third party.

Chevron requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nippled up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC Technologies and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party.

4. **CASING PROGRAM**

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	450'	17-1/2" to 16"	13-3/8"	54.5 #	J-55	BTC/STC	New
Intermediate	0'	2,200'	12-1/4"	9-5/8"	40#	L-80	BTC/LTC	New
Production	0'	8,565'	8-3/4"	7"	29.0 #	P110/TN110S	BLUE	New
Production Liner	8,265'	20,688'	6-1/8"	4-1/2"	11.6 #	P110/TN110S	W521	New

b. **Casing design subject to revision based on geologic conditions encountered.**

c. **A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.**

d. **Chevron will fill casing at a minimum of every 20 jts (~840') while running for intermediate and production casing in order to maintain collapse SF.**

SF Calculations based on the following "Worst Case" casing design:

Surface Casing:	450'	ftTVD
Intermediate Casing:	2,200'	ftTVD
Production Casing:	8,565'	ftTVD
Production Casing:	22,000'	ftMD

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.79	5.19	6.03	2.22
Intermediate	1.46	2.41	4.29	1.79
Production	1.10	1.76	1.84	1.29
Production Liner	1.38	1.02	1.61	1.54

The following worst case load cases were considered for calculation of the above Min. Safety Factors:

Burst Design	Surf	Int	Prod	Prod Lnr
Pressure Test- Surface, Int, Prod Csg P external: Mud weight above TOC, PP below P internal: Test psi + next section heaviest mud in csg	X	X	X	X
Displace to Gas- Surf Csg P external: Mud weight above TOC, PP below P internal: Dry Gas from Next Csg Point	X			
Gas over mud (60/40) - Int Csg P external: Mud weight above TOC, PP below P internal: 60% gas over 40% mud from hole TD PP		X		
Stimulation (Frac) Pressures- Prod Csg P external: Mud weight above TOC, PP below P internal: Max inj pressure w/ heaviest injected fluid			X	X
Tubing leak- Prod Csg (packer at KOP) P external: Mud weight above TOC, PP below P internal: Leak just below surf, 8.45 ppg packer fluid			X	X
Collapse Design	Surf	Int	Prod	Prod
Full Evacuation P external: Mud weight gradient P internal: none	X	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: displacement fluid - water	X	X	X	X
Tension Design	Surf	Int	Prod	Prod
100k lb overpull	X	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	*Sacks*	Yield	Density	%Excess	Water	*Volume*	Additives
Surface 13-3/8					(cu ft/sk)	(ppg)	Open Hole	gal/sk	cuft	
Tail	Class C	0'	450'	279	1.4	14.5	25	6.50	391	Extender, Antifoam, Retarder
Intermediate Csg 9-5/8										
Lead	Class C	0'	1,100'	171	2.52	11.5	25	14.60	431	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	1,100'	2,200'	287	1.63	13.6	25	8.64	468	Extender, Antifoam, Retarder, Viscosifier
Production 7"										
Lead	Class C	0'	7,565'	538	2.52	11.5	25	14.60	1357	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	7,565'	8,565'	134	1.4	14.5	25	6.50	188	Extender, Antifoam, Retarder, Viscosifier
Production Liner 4-1/2"										
Lead	Class C	8,265'	20,688'	1045	1.4	14.5	25	6.50	1462	Extender, Antifoam, Retarder, Viscosifier

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one solid body type centralizer on every joint in the lateral, then every other joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing and surface.

6. **MUD PROGRAM**

From	To	Type	Weight	Viscosity	Filtrate	Notes
0'	450'	Fresh water mud	8.3 - 9.1	28-30	N/C	
450'	2,200'	Brine	8.8 - 10.5	26-36	15-25	
2,200'	8,565'	Cut Brine	8.7 - 9.6	26-36	15-25	
8,565'	20,688'	OBM	9.2 - 13.6	50-70	5-10	Due to wellbore stability, the mud program may exceed the MW weight window needed to maintain overburden of pore pressure.

A closed system will be used consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating of E&P waste will follow EPA regulations and accompanying manifests.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. **TESTING, LOGGING, AND CORING**

The anticipated type and amount of testing, logging, and coring are as follows:

a. Drill stem tests are not planned.
b. The logging program will be as follows:

TYPE	Logs	Interval	Timing
Mudlogs	2 man mudlog	Surface casing shoe through prod hole TD	While drilling or circulating
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling

c. Conventional whole core samples are not planned.
d. A directional survey will be run.

8. **ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

a. No abnormal pressure or temperatures are expected. Estimated BHP is: **5,092** psi
b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

Schlumberger

Chevron

Chevron Cicada Unit 33H R3 mdv 01Oct20 Proposal Geodetic Report

(Def Plan)

Report Date:	October 19, 2020 - 10:11 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Chevron	**Vertical Section Azimuth:**	181.380 ° (Grid North)
Field:	NM Eddy County (NAD 27)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Chevron Cicada Unit Pkg 10 / 33H	**TVD Reference Datum:**	RKB = 28ft
Well:	Cicada Unit 033H	**TVD Reference Elevation:**	3154.000 ft above MSL
Borehole:	Cicada Unit 033H	**Seabed / Ground Elevation:**	3126.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.024 °
Survey Name:	Chevron Cicada Unit 33H R3 mdv 01Oct20	**Total Gravity Field Strength:**	998.4437mgn (9.80665 Based)
Survey Date:	October 01, 2020	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	113.590 ° / 13755.551 ft / 6.546 / 1.496	**Total Magnetic Field Strength:**	47684.993 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.721 °
Location Lat / Long:	N 32° 5' 41.15671", W 104° 9' 31.72327"	**Declination Date:**	October 01, 2020
Location Grid N/E Y/X:	N 398243.000 ftUS, E 554045.000 ftUS	**Magnetic Declination Model:**	HDGM 2020
CRS Grid Convergence Angle:	0.0927 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99991244	**Grid Convergence Used:**	0.0927 °
Version / Patch:	2.10.820.4	**Total Corr Mag North->Grid North:**	6.9309 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
	100.00	0.00	271.21	100.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
	200.00	0.00	271.21	200.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
	300.00	0.00	271.21	300.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
	400.00	0.00	271.21	400.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
13 3/8" Casing	*450.00*	*0.00*	*271.21*	*450.00*	*0.00*	*0.00*	*0.00*	*0.00*	*398243.00*	*554045.00*	*N 32 5 41.16*	*W 104 9 31.72*
	500.00	0.00	271.21	500.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
Build 1.5°/100ft	600.00	0.00	271.21	600.00	0.00	0.00	0.00	0.00	398243.00	554045.00	N 32 5 41.16	W 104 9 31.72
	700.00	1.50	271.21	699.99	0.00	0.03	-1.31	1.50	398243.03	554043.69	N 32 5 41.16	W 104 9 31.74
	800.00	3.00	271.21	799.91	0.02	0.11	-5.23	1.50	398243.11	554039.77	N 32 5 41.16	W 104 9 31.78
	900.00	4.50	271.21	899.69	0.04	0.25	-11.77	1.50	398243.25	554033.23	N 32 5 41.16	W 104 9 31.86
Salado / Castile	*909.34*	*4.64*	*271.21*	*909.00*	*0.04*	*0.26*	*-12.52*	*1.50*	*398243.26*	*554032.48*	*N 32 5 41.16*	*W 104 9 31.87*
	1000.00	6.00	271.21	999.27	0.06	0.44	-20.92	1.50	398243.44	554024.08	N 32 5 41.16	W 104 9 31.97
	1100.00	7.50	271.21	1098.57	0.10	0.69	-32.67	1.50	398243.69	554012.33	N 32 5 41.16	W 104 9 32.10
	1200.00	9.00	271.21	1197.54	0.14	0.99	-47.02	1.50	398243.99	553997.99	N 32 5 41.17	W 104 9 32.27
	1300.00	10.50	271.21	1296.09	0.19	1.35	-63.95	1.50	398244.35	553981.06	N 32 5 41.17	W 104 9 32.47
	1400.00	12.00	271.21	1394.16	0.25	1.76	-83.45	1.50	398244.76	553961.56	N 32 5 41.18	W 104 9 32.69
	1500.00	13.50	271.21	1491.70	0.32	2.23	-105.52	1.50	398245.23	553939.49	N 32 5 41.18	W 104 9 32.95
	1600.00	15.00	271.21	1588.62	0.39	2.75	-130.12	1.50	398245.75	553914.89	N 32 5 41.19	W 104 9 33.24
	1700.00	16.50	271.21	1684.86	0.47	3.32	-157.26	1.50	398246.32	553887.75	N 32 5 41.19	W 104 9 33.55
Hold	1758.76	17.38	271.21	1741.07	0.52	3.68	-174.38	1.50	398246.68	553870.64	N 32 5 41.20	W 104 9 33.75
	1800.00	17.38	271.21	1780.43	0.56	3.94	-186.70	0.00	398246.94	553858.32	N 32 5 41.20	W 104 9 33.89
	1900.00	17.38	271.21	1875.86	0.65	4.57	-216.56	0.00	398247.57	553828.46	N 32 5 41.21	W 104 9 34.24
	2000.00	17.38	271.21	1971.29	0.74	5.20	-246.43	0.00	398248.20	553798.59	N 32 5 41.21	W 104 9 34.59
	2100.00	17.38	271.21	2066.73	0.83	5.83	-276.30	0.00	398248.83	553768.73	N 32 5 41.22	W 104 9 34.93
	2200.00	17.38	271.21	2162.16	0.92	6.46	-306.16	0.00	398249.46	553738.87	N 32 5 41.23	W 104 9 35.28
	2300.00	17.38	271.21	2257.59	1.01	7.09	-336.03	0.00	398250.09	553709.00	N 32 5 41.23	W 104 9 35.63
9 5/8" Casing	*2332.91*	*17.38*	*271.21*	*2289.00*	*1.03*	*7.30*	*-345.86*	*0.00*	*398250.30*	*553699.17*	*N 32 5 41.23*	*W 104 9 35.74*
Lamar Lime	*2348.63*	*17.38*	*271.21*	*2304.00*	*1.05*	*7.40*	*-350.55*	*0.00*	*398250.40*	*553694.48*	*N 32 5 41.24*	*W 104 9 35.80*
Bell Canyon	*2375.87*	*17.38*	*271.21*	*2330.00*	*1.07*	*7.57*	*-358.69*	*0.00*	*398250.57*	*553686.34*	*N 32 5 41.24*	*W 104 9 35.89*
	2400.00	17.38	271.21	2353.03	1.09	7.72	-365.89	0.00	398250.72	553679.14	N 32 5 41.24	W 104 9 35.98
	2500.00	17.38	271.21	2448.46	1.18	8.35	-395.76	0.00	398251.35	553649.27	N 32 5 41.25	W 104 9 36.32
	2600.00	17.38	271.21	2543.90	1.27	8.98	-425.63	0.00	398251.98	553619.41	N 32 5 41.25	W 104 9 36.67
	2700.00	17.38	271.21	2639.33	1.36	9.61	-455.49	0.00	398252.61	553589.55	N 32 5 41.26	W 104 9 37.02
	2800.00	17.38	271.21	2734.76	1.45	10.24	-485.36	0.00	398253.24	553559.68	N 32 5 41.27	W 104 9 37.36
	2900.00	17.38	271.21	2830.20	1.54	10.87	-515.23	0.00	398253.87	553529.82	N 32 5 41.27	W 104 9 37.71
	3000.00	17.38	271.21	2925.63	1.63	11.50	-545.09	0.00	398254.50	553499.96	N 32 5 41.28	W 104 9 38.06
	3100.00	17.38	271.21	3021.06	1.72	12.13	-574.96	0.00	398255.13	553470.09	N 32 5 41.29	W 104 9 38.41
	3200.00	17.38	271.21	3116.50	1.81	12.76	-604.83	0.00	398255.76	553440.23	N 32 5 41.29	W 104 9 38.75
Cherry Canyon	*3257.11*	*17.38*	*271.21*	*3171.00*	*1.86*	*13.12*	*-621.88*	*0.00*	*398256.12*	*553423.17*	*N 32 5 41.30*	*W 104 9 38.95*
	3300.00	17.38	271.21	3211.93	1.90	13.39	-634.69	0.00	398256.39	553410.36	N 32 5 41.30	W 104 9 39.10
	3400.00	17.38	271.21	3307.37	1.99	14.02	-664.56	0.00	398257.02	553380.50	N 32 5 41.31	W 104 9 39.45
	3500.00	17.38	271.21	3402.80	2.08	14.65	-694.42	0.00	398257.65	553350.64	N 32 5 41.31	W 104 9 39.79
	3600.00	17.38	271.21	3498.23	2.17	15.28	-724.29	0.00	398258.28	553320.77	N 32 5 41.32	W 104 9 40.14
	3700.00	17.38	271.21	3593.67	2.26	15.91	-754.16	0.00	398258.91	553290.91	N 32 5 41.33	W 104 9 40.49
	3800.00	17.38	271.21	3689.10	2.35	16.54	-784.02	0.00	398259.54	553261.05	N 32 5 41.33	W 104 9 40.84
	3900.00	17.38	271.21	3784.53	2.44	17.17	-813.89	0.00	398260.17	553231.18	N 32 5 41.34	W 104 9 41.18
	4000.00	17.38	271.21	3879.97	2.52	17.80	-843.76	0.00	398260.80	553201.32	N 32 5 41.35	W 104 9 41.53
	4100.00	17.38	271.21	3975.40	2.61	18.43	-873.62	0.00	398261.43	553171.46	N 32 5 41.35	W 104 9 41.88
	4200.00	17.38	271.21	4070.84	2.70	19.06	-903.49	0.00	398262.06	553141.59	N 32 5 41.36	W 104 9 42.23
	4300.00	17.38	271.21	4166.27	2.79	19.69	-933.36	0.00	398262.69	553111.73	N 32 5 41.37	W 104 9 42.57
	4400.00	17.38	271.21	4261.70	2.88	20.32	-963.22	0.00	398263.32	553081.86	N 32 5 41.37	W 104 9 42.92
Brushy Canyon	*4414.98*	*17.38*	*271.21*	*4276.00*	*2.90*	*20.42*	*-967.70*	*0.00*	*398263.41*	*553077.39*	*N 32 5 41.37*	*W 104 9 42.97*
	4500.00	17.38	271.21	4357.14	2.97	20.95	-993.09	0.00	398263.95	553052.00	N 32 5 41.38	W 104 9 43.27
	4600.00	17.38	271.21	4452.57	3.06	21.58	-1022.96	0.00	398264.58	553022.14	N 32 5 41.39	W 104 9 43.61
	4700.00	17.38	271.21	4548.00	3.15	22.21	-1052.82	0.00	398265.21	552992.27	N 32 5 41.39	W 104 9 43.96
	4800.00	17.38	271.21	4643.44	3.24	22.84	-1082.69	0.00	398265.84	552962.41	N 32 5 41.40	W 104 9 44.31
	4900.00	17.38	271.21	4738.87	3.33	23.47	-1112.55	0.00	398266.47	552932.55	N 32 5 41.41	W 104 9 44.66
	5000.00	17.38	271.21	4834.31	3.42	24.10	-1142.42	0.00	398267.10	552902.68	N 32 5 41.41	W 104 9 45.00
	5100.00	17.38	271.21	4929.74	3.51	24.73	-1172.29	0.00	398267.73	552872.82	N 32 5 41.42	W 104 9 45.35
	5200.00	17.38	271.21	5025.17	3.60	25.36	-1202.15	0.00	398268.36	552842.95	N 32 5 41.43	W 104 9 45.70
	5300.00	17.38	271.21	5120.61	3.69	25.99	-1232.02	0.00	398268.99	552813.09	N 32 5 41.43	W 104 9 46.04
	5400.00	17.38	271.21	5216.04	3.78	26.62	-1261.89	0.00	398269.62	552783.23	N 32 5 41.44	W 104 9 46.39
	5500.00	17.38	271.21	5311.47	3.86	27.25	-1291.75	0.00	398270.25	552753.36	N 32 5 41.45	W 104 9 46.74
	5600.00	17.38	271.21	5406.91	3.95	27.88	-1321.62	0.00	398270.88	552723.50	N 32 5 41.45	W 104 9 47.09
	5700.00	17.38	271.21	5502.34	4.04	28.51	-1351.49	0.00	398271.51	552693.64	N 32 5 41.46	W 104 9 47.43
	5800.00	17.38	271.21	5597.78	4.13	29.14	-1381.35	0.00	398272.14	552663.77	N 32 5 41.47	W 104 9 47.78
	5900.00	17.38	271.21	5693.21	4.22	29.77	-1411.22	0.00	398272.77	552633.91	N 32 5 41.47	W 104 9 48.13
	6000.00	17.38	271.21	5788.64	4.31	30.40	-1441.08	0.00	398273.40	552604.04	N 32 5 41.48	W 104 9 48.47
	6100.00	17.38	271.21	5884.08	4.40	31.03	-1470.95	0.00	398274.03	552574.18	N 32 5 41.49	W 104 9 48.82
Bone Spring	*6191.32*	*17.38*	*271.21*	*5971.23*	*4.48*	*31.61*	*-1498.23*	*0.00*	*398274.61*	*552546.91*	*N 32 5 41.49*	*W 104 9 49.14*
	6200.00	17.38	271.21	5979.51	4.49	31.66	-1500.82	0.00	398274.66	552544.32	N 32 5 41.49	W 104 9 49.17
Avalon	*6233.72*	*17.38*	*271.21*	*6011.69*	*4.52*	*31.88*	*-1510.89*	*0.00*	*398274.87*	*552534.25*	*N 32 5 41.50*	*W 104 9 49.29*
	6300.00	17.38	271.21	6074.94	4.58	32.29	-1530.68	0.00	398275.29	552514.45	N 32 5 41.50	W 104 9 49.52
	6400.00	17.38	271.21	6170.38	4.67	32.92	-1560.55	0.00	398275.92	552484.59	N 32 5 41.51	W 104 9 49.86
	6500.00	17.38	271.21	6265.81	4.76	33.55	-1590.42	0.00	398276.55	552454.73	N 32 5 41.51	W 104 9 50.21
	6600.00	17.38	271.21	6361.25	4.85	34.18	-1620.28	0.00	398277.18	552424.86	N 32 5 41.52	W 104 9 50.56

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6700.00	17.38	271.21	6456.68	4.94	34.81	-1650.15	0.00	398277.81	552395.00	N 32 5 41.53	W 104 9 50.90
	6800.00	17.38	271.21	6552.11	5.03	35.44	-1680.02	0.00	398278.44	552365.14	N 32 5 41.53	W 104 9 51.25
	6900.00	17.38	271.21	6647.55	5.12	36.07	-1709.88	0.00	398279.07	552335.27	N 32 5 41.54	W 104 9 51.60
	7000.00	17.38	271.21	6742.98	5.21	36.70	-1739.75	0.00	398279.70	552305.41	N 32 5 41.55	W 104 9 51.95
1st Bone Spring	*7063.76*	*17.38*	*271.21*	*6803.83*	*5.26*	*37.11*	*-1758.79*	*0.00*	*398280.10*	*552286.37*	*N 32 5 41.55*	*W 104 9 52.17*
	7100.00	17.38	271.21	6838.41	5.29	37.33	-1769.61	0.00	398280.33	552275.54	N 32 5 41.55	W 104 9 52.29
	7200.00	17.38	271.21	6933.85	5.38	37.96	-1799.48	0.00	398280.96	552245.68	N 32 5 41.56	W 104 9 52.64
	7300.00	17.38	271.21	7029.28	5.47	38.59	-1829.35	0.00	398281.59	552215.82	N 32 5 41.57	W 104 9 52.99
	7400.00	17.38	271.21	7124.72	5.56	39.22	-1859.21	0.00	398282.22	552185.95	N 32 5 41.57	W 104 9 53.33
	7500.00	17.38	271.21	7220.15	5.65	39.85	-1889.08	0.00	398282.85	552156.09	N 32 5 41.58	W 104 9 53.68
	7600.00	17.38	271.21	7315.58	5.74	40.48	-1918.95	0.00	398283.48	552126.23	N 32 5 41.59	W 104 9 54.03
2nd Bone Spring	*7646.03*	*17.38*	*271.21*	*7359.51*	*5.78*	*40.77*	*-1932.69*	*0.00*	*398283.77*	*552112.48*	*N 32 5 41.59*	*W 104 9 54.19*
	7700.00	17.38	271.21	7411.02	5.83	41.11	-1948.81	0.00	398284.11	552096.36	N 32 5 41.59	W 104 9 54.38
	7800.00	17.38	271.21	7506.45	5.92	41.74	-1978.68	0.00	398284.74	552066.50	N 32 5 41.60	W 104 9 54.72
	7900.00	17.38	271.21	7601.88	6.01	42.38	-2008.55	0.00	398285.37	552036.63	N 32 5 41.61	W 104 9 55.07
	8000.00	17.38	271.21	7697.32	6.10	43.01	-2038.41	0.00	398286.00	552006.77	N 32 5 41.61	W 104 9 55.42
	8100.00	17.38	271.21	7792.75	6.19	43.64	-2068.28	0.00	398286.63	551976.91	N 32 5 41.62	W 104 9 55.76
	8200.00	17.38	271.21	7888.19	6.28	44.27	-2098.14	0.00	398287.26	551947.04	N 32 5 41.63	W 104 9 56.11
	8300.00	17.38	271.21	7983.62	6.37	44.90	-2128.01	0.00	398287.89	551917.18	N 32 5 41.63	W 104 9 56.46
	8400.00	17.38	271.21	8079.05	6.46	45.53	-2157.88	0.00	398288.52	551887.32	N 32 5 41.64	W 104 9 56.81
	8500.00	17.38	271.21	8174.49	6.55	46.16	-2187.74	0.00	398289.15	551857.45	N 32 5 41.65	W 104 9 57.15
	8600.00	17.38	271.21	8269.92	6.64	46.79	-2217.61	0.00	398289.78	551827.59	N 32 5 41.65	W 104 9 57.50
	8700.00	17.38	271.21	8365.35	6.72	47.42	-2247.48	0.00	398290.41	551797.72	N 32 5 41.66	W 104 9 57.85
7" Casing	*8777.17*	*17.38*	*271.21*	*8439.00*	*6.79*	*47.90*	*-2270.52*	*0.00*	*398290.90*	*551774.68*	*N 32 5 41.67*	*W 104 9 58.11*
	8800.00	17.38	271.21	8460.79	6.81	48.05	-2277.34	0.00	398291.04	551767.86	N 32 5 41.67	W 104 9 58.19
3rd Bs Carb	*8818.49*	*17.38*	*271.21*	*8478.43*	*6.83*	*48.16*	*-2282.86*	*0.00*	*398291.16*	*551762.34*	*N 32 5 41.67*	*W 104 9 58.26*
	8900.00	17.38	271.21	8556.22	6.90	48.68	-2307.21	0.00	398291.67	551738.00	N 32 5 41.67	W 104 9 58.54
3rd Bone Spring	*8965.56*	*17.38*	*271.21*	*8618.79*	*6.96*	*49.09*	*-2326.79*	*0.00*	*398292.08*	*551718.42*	*N 32 5 41.68*	*W 104 9 58.77*
	9000.00	17.38	271.21	8651.66	6.99	49.31	-2337.08	0.00	398292.30	551708.13	N 32 5 41.68	W 104 9 58.89
Build/Turn 10°/100ft	9021.22	17.38	271.21	8671.91	7.01	49.44	-2343.41	0.00	398292.44	551701.80	N 32 5 41.68	W 104 9 58.96
	9100.00	20.03	247.87	8746.62	12.44	44.60	-2367.71	10.00	398287.59	551677.50	N 32 5 41.64	W 104 9 59.24
	9200.00	26.46	228.20	8838.60	34.57	23.25	-2400.26	10.00	398266.24	551644.95	N 32 5 41.42	W 104 9 59.62
	9300.00	34.53	216.47	8924.77	73.10	-14.49	-2433.80	10.00	398228.51	551611.42	N 32 5 41.05	W 104 10 0.01
Wolfcamp A	*9375.40*	*41.13*	*210.50*	*8984.31*	*112.31*	*-53.10*	*-2459.13*	*10.00*	*398189.91*	*551586.09*	*N 32 5 40.67*	*W 104 10 0.31*
	9400.00	43.34	208.89	9002.52	126.87	-67.46	-2467.31	10.00	398175.54	551577.91	N 32 5 40.53	W 104 10 0.40
	9500.00	52.50	203.47	9069.49	194.23	-134.07	-2499.77	10.00	398108.95	551545.45	N 32 5 39.87	W 104 10 0.78
WCA1	*9526.43*	*54.96*	*202.27*	*9085.13*	*214.06*	*-153.70*	*-2508.05*	*10.00*	*398089.31*	*551537.17*	*N 32 5 39.67*	*W 104 10 0.88*
	9600.00	61.86	199.27	9123.65	273.15	-212.27	-2530.20	10.00	398030.75	551515.03	N 32 5 39.10	W 104 10 1.14
	9700.00	71.33	195.74	9163.34	361.22	-299.71	-2557.67	10.00	397943.32	551487.56	N 32 5 38.23	W 104 10 1.46
	9800.00	80.85	192.59	9187.36	455.77	-393.71	-2581.34	10.00	397849.32	551463.89	N 32 5 37.30	W 104 10 1.74
FTP Cross Landing Point	9897.02	90.11	189.70	9195.00	550.97	-488.50	-2600.00	10.00	397754.54	551445.23	N 32 5 36.36	W 104 10 1.95
	9900.00	90.11	189.70	9194.99	553.92	-491.43	-2600.50	0.00	397751.61	551444.73	N 32 5 36.33	W 104 10 1.96
	10000.00	90.11	189.70	9194.80	652.87	-590.00	-2617.35	0.00	397653.05	551427.88	N 32 5 35.36	W 104 10 2.16
	10100.00	90.11	189.70	9194.60	751.81	-688.57	-2634.20	0.00	397554.49	551411.04	N 32 5 34.38	W 104 10 2.36
	10200.00	90.11	189.70	9194.40	850.76	-787.14	-2651.05	0.00	397455.93	551394.19	N 32 5 33.41	W 104 10 2.55
Turn 2°/100ft	10262.02	90.11	189.70	9194.28	912.13	-848.28	-2661.50	0.00	397394.79	551383.74	N 32 5 32.80	W 104 10 2.68
	10300.00	90.11	188.94	9194.20	949.74	-885.76	-2667.65	2.00	397357.32	551377.59	N 32 5 32.43	W 104 10 2.75
	10400.00	90.11	186.94	9194.01	1049.08	-984.79	-2681.46	2.00	397258.30	551363.78	N 32 5 31.45	W 104 10 2.91
	10500.00	90.11	184.94	9193.81	1148.76	-1084.25	-2691.81	2.00	397158.85	551353.43	N 32 5 30.47	W 104 10 3.03
	10600.00	90.11	182.94	9193.61	1248.66	-1184.01	-2698.68	2.00	397059.10	551346.56	N 32 5 29.48	W 104 10 3.11
Hold	10664.54	90.11	181.65	9193.48	1313.19	-1248.50	-2701.27	2.00	396994.61	551343.97	N 32 5 28.84	W 104 10 3.15
	10700.00	90.11	181.65	9193.41	1348.65	-1283.94	-2702.29	0.00	396959.18	551342.95	N 32 5 28.49	W 104 10 3.16
	10800.00	90.11	181.65	9193.22	1448.65	-1383.90	-2705.17	0.00	396859.23	551340.08	N 32 5 27.50	W 104 10 3.19
	10900.00	90.11	181.65	9193.02	1548.64	-1483.86	-2708.05	0.00	396759.28	551337.20	N 32 5 26.52	W 104 10 3.23
	11000.00	90.11	181.65	9192.82	1648.64	-1583.82	-2710.92	0.00	396659.33	551334.32	N 32 5 25.53	W 104 10 3.26
	11100.00	90.11	181.65	9192.62	1748.64	-1683.77	-2713.80	0.00	396559.38	551331.44	N 32 5 24.54	W 104 10 3.30
	11200.00	90.11	181.65	9192.43	1848.64	-1783.73	-2716.68	0.00	396459.43	551328.56	N 32 5 23.55	W 104 10 3.33
	11300.00	90.11	181.65	9192.23	1948.64	-1883.69	-2719.56	0.00	396359.48	551325.68	N 32 5 22.56	W 104 10 3.37
	11400.00	90.11	181.65	9192.03	2048.64	-1983.65	-2722.44	0.00	396259.53	551322.80	N 32 5 21.57	W 104 10 3.40
	11500.00	90.11	181.65	9191.84	2148.64	-2083.61	-2725.32	0.00	396159.58	551319.93	N 32 5 20.58	W 104 10 3.44
	11600.00	90.11	181.65	9191.64	2248.64	-2183.57	-2728.20	0.00	396059.63	551317.05	N 32 5 19.59	W 104 10 3.47
	11700.00	90.11	181.65	9191.44	2348.63	-2283.52	-2731.07	0.00	395959.68	551314.17	N 32 5 18.60	W 104 10 3.51
	11800.00	90.11	181.65	9191.24	2448.63	-2383.48	-2733.95	0.00	395859.73	551311.29	N 32 5 17.61	W 104 10 3.55
	11900.00	90.11	181.65	9191.05	2548.63	-2483.44	-2736.83	0.00	395759.78	551308.41	N 32 5 16.62	W 104 10 3.58
	12000.00	90.11	181.65	9190.85	2648.63	-2583.40	-2739.71	0.00	395659.83	551305.53	N 32 5 15.64	W 104 10 3.62
	12100.00	90.11	181.65	9190.65	2748.63	-2683.36	-2742.59	0.00	395559.88	551302.66	N 32 5 14.65	W 104 10 3.65
	12200.00	90.11	181.65	9190.46	2848.63	-2783.32	-2745.47	0.00	395459.93	551299.78	N 32 5 13.66	W 104 10 3.69
	12300.00	90.11	181.65	9190.26	2948.63	-2883.27	-2748.35	0.00	395359.98	551296.90	N 32 5 12.67	W 104 10 3.72
	12400.00	90.11	181.65	9190.06	3048.63	-2983.23	-2751.23	0.00	395260.04	551294.02	N 32 5 11.68	W 104 10 3.76
	12500.00	90.11	181.65	9189.86	3148.62	-3083.19	-2754.10	0.00	395160.09	551291.14	N 32 5 10.69	W 104 10 3.79
	12600.00	90.11	181.65	9189.67	3248.62	-3183.15	-2756.98	0.00	395060.14	551288.26	N 32 5 9.70	W 104 10 3.83
	12700.00	90.11	181.65	9189.47	3348.62	-3283.11	-2759.86	0.00	394960.19	551285.39	N 32 5 8.71	W 104 10 3.86
	12800.00	90.11	181.65	9189.27	3448.62	-3383.07	-2762.74	0.00	394860.24	551282.51	N 32 5 7.72	W 104 10 3.90
	12900.00	90.11	181.65	9189.08	3548.62	-3483.02	-2765.62	0.00	394760.29	551279.63	N 32 5 6.73	W 104 10 3.93
	13000.00	90.11	181.65	9188.88	3648.62	-3582.98	-2768.50	0.00	394660.34	551276.75	N 32 5 5.74	W 104 10 3.97
	13100.00	90.11	181.65	9188.68	3748.62	-3682.94	-2771.38	0.00	394560.39	551273.87	N 32 5 4.75	W 104 10 4.00
	13200.00	90.11	181.65	9188.48	3848.61	-3782.90	-2774.25	0.00	394460.44	551270.99	N 32 5 3.77	W 104 10 4.04
	13300.00	90.11	181.65	9188.29	3948.61	-3882.86	-2777.13	0.00	394360.49	551268.12	N 32 5 2.78	W 104 10 4.07
	13400.00	90.11	181.65	9188.09	4048.61	-3982.82	-2780.01	0.00	394260.54	551265.24	N 32 5 1.79	W 104 10 4.11
	13500.00	90.11	181.65	9187.89	4148.61	-4082.77	-2782.89	0.00	394160.59	551262.36	N 32 5 0.80	W 104 10 4.14
	13600.00	90.11	181.65	9187.70	4248.61	-4182.73	-2785.77	0.00	394060.64	551259.48	N 32 4 59.81	W 104 10 4.18
	13700.00	90.11	181.65	9187.50	4348.61	-4282.69	-2788.65	0.00	393960.69	551256.60	N 32 4 58.82	W 104 10 4.21
	13800.00	90.11	181.65	9187.30	4448.61	-4382.65	-2791.53	0.00	393860.74	551253.72	N 32 4 57.83	W 104 10 4.25
	13900.00	90.11	181.65	9187.10	4548.61	-4482.61	-2794.41	0.00	393760.79	551250.85	N 32 4 56.84	W 104 10 4.29
	14000.00	90.11	181.65	9186.91	4648.60	-4582.57	-2797.28	0.00	393660.84	551247.97	N 32 4 55.85	W 104 10 4.32
	14100.00	90.11	181.65	9186.71	4748.60	-4682.52	-2800.16	0.00	393560.90	551245.09	N 32 4 54.86	W 104 10 4.36
	14200.00	90.11	181.65	9186.51	4848.60	-4782.48	-2803.04	0.00	393460.95	551242.21	N 32 4 53.87	W 104 10 4.39
	14300.00	90.11	181.65	9186.32	4948.60	-4882.44	-2805.92	0.00	393361.00	551239.33	N 32 4 52.89	W 104 10 4.43
	14400.00	90.11	181.65	9186.12	5048.60	-4982.40	-2808.80	0.00	393261.05	551236.45	N 32 4 51.90	W 104 10 4.46
	14500.00	90.11	181.65	9185.92	5148.60	-5082.36	-2811.68	0.00	393161.10	551233.57	N 32 4 50.91	W 104 10 4.50
	14600.00	90.11	181.65	9185.72	5248.60	-5182.32	-2814.56	0.00	393061.15	551230.70	N 32 4 49.92	W 104 10 4.53
	14700.00	90.11	181.65	9185.53	5348.60	-5282.27	-2817.43	0.00	392961.20	551227.82	N 32 4 48.93	W 104 10 4.57
	14800.00	90.11	181.65	9185.33	5448.59	-5382.23	-2820.31	0.00	392861.25	551224.94	N 32 4 47.94	W 104 10 4.60
	14900.00	90.11	181.65	9185.13	5548.59	-5482.19	-2823.19	0.00	392761.30	551222.06	N 32 4 46.95	W 104 10 4.64
IFP1, Build 2°/100ft	14967.33	90.11	181.65	9185.00	5615.93	-5549.50	-2825.13	0.00	392694.00	551220.12	N 32 4 46.28	W 104 10 4.66
Hold	14969.69	90.16	181.65	9184.99	5618.28	-5551.85	-2825.20	2.00	392691.65	551220.06	N 32 4 46.26	W 104 10 4.66
	15000.00	90.16	181.65	9184.91	5648.59	-5582.15	-2826.07	0.00	392661.35	551219.18	N 32 4 45.96	W 104 10 4.67
	15100.00	90.16	181.65	9184.63	5748.59	-5682.11	-2828.95	0.00	392561.40	551216.30	N 32 4 44.97	W 104 10 4.71
	15200.00	90.16	181.65	9184.35	5848.59	-5782.07	-2831.83	0.00	392461.45	551213.42	N 32 4 43.98	W 104 10 4.74
MP, Turn 2°/100ft	15214.47	90.16	181.65	9184.31	5863.05	-5796.53	-2832.25	0.00	392446.99	551213.01	N 32 4 43.84	W 104 10 4.75
Hold	15241.01	90.16	181.12	9184.24	5889.60	-5823.07	-2832.89	2.00	392420.46	551212.37	N 32 4 43.58	W 104 10 4.76
	15300.00	90.16	181.12	9184.07	5948.59	-5882.04	-2834.04	0.00	392361.49	551211.21	N 32 4 42.99	W 104 10 4.77

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	15400.00	90.16	181.12	9183.79	6048.59	-5982.02	-2835.99	0.00	392261.51	551209.26	N 32 4 42.00	W 104 10 4.80
	15500.00	90.16	181.12	9183.51	6148.58	-6082.00	-2837.95	0.00	392161.54	551207.31	N 32 4 41.02	W 104 10 4.82
	15600.00	90.16	181.12	9183.23	6248.58	-6181.98	-2839.90	0.00	392061.57	551205.36	N 32 4 40.03	W 104 10 4.84
	15700.00	90.16	181.12	9182.95	6348.58	-6281.96	-2841.85	0.00	391961.60	551203.40	N 32 4 39.04	W 104 10 4.87
	15800.00	90.16	181.12	9182.67	6448.58	-6381.94	-2843.80	0.00	391861.63	551201.45	N 32 4 38.05	W 104 10 4.89
	15900.00	90.16	181.12	9182.39	6548.58	-6481.92	-2845.76	0.00	391761.66	551199.50	N 32 4 37.06	W 104 10 4.92
	16000.00	90.16	181.12	9182.11	6648.58	-6581.90	-2847.71	0.00	391661.69	551197.55	N 32 4 36.07	W 104 10 4.94
	16100.00	90.16	181.12	9181.83	6748.58	-6681.88	-2849.66	0.00	391561.71	551195.59	N 32 4 35.08	W 104 10 4.97
	16200.00	90.16	181.12	9181.55	6848.57	-6781.87	-2851.62	0.00	391461.74	551193.64	N 32 4 34.09	W 104 10 4.99
	16300.00	90.16	181.12	9181.27	6948.57	-6881.85	-2853.57	0.00	391361.77	551191.69	N 32 4 33.10	W 104 10 5.02
	16400.00	90.16	181.12	9180.99	7048.57	-6981.83	-2855.52	0.00	391261.80	551189.73	N 32 4 32.11	W 104 10 5.04
	16500.00	90.16	181.12	9180.71	7148.57	-7081.81	-2857.47	0.00	391161.83	551187.78	N 32 4 31.12	W 104 10 5.06
	16600.00	90.16	181.12	9180.44	7248.57	-7181.79	-2859.43	0.00	391061.86	551185.83	N 32 4 30.13	W 104 10 5.09
	16700.00	90.16	181.12	9180.16	7348.57	-7281.77	-2861.38	0.00	390961.88	551183.88	N 32 4 29.14	W 104 10 5.11
	16800.00	90.16	181.12	9179.88	7448.57	-7381.75	-2863.33	0.00	390861.91	551181.92	N 32 4 28.15	W 104 10 5.14
	16900.00	90.16	181.12	9179.60	7548.56	-7481.73	-2865.29	0.00	390761.94	551179.97	N 32 4 27.16	W 104 10 5.16
	17000.00	90.16	181.12	9179.32	7648.56	-7581.71	-2867.24	0.00	390661.97	551178.02	N 32 4 26.18	W 104 10 5.19
	17100.00	90.16	181.12	9179.04	7748.56	-7681.69	-2869.19	0.00	390562.00	551176.07	N 32 4 25.19	W 104 10 5.21
	17200.00	90.16	181.12	9178.76	7848.56	-7781.67	-2871.14	0.00	390462.03	551174.11	N 32 4 24.20	W 104 10 5.24
	17300.00	90.16	181.12	9178.48	7948.56	-7881.65	-2873.10	0.00	390362.05	551172.16	N 32 4 23.21	W 104 10 5.26
	17400.00	90.16	181.12	9178.20	8048.56	-7981.63	-2875.05	0.00	390262.08	551170.21	N 32 4 22.22	W 104 10 5.28
	17500.00	90.16	181.12	9177.92	8148.56	-8081.61	-2877.00	0.00	390162.11	551168.25	N 32 4 21.23	W 104 10 5.31
	17600.00	90.16	181.12	9177.64	8248.55	-8181.59	-2878.96	0.00	390062.14	551166.30	N 32 4 20.24	W 104 10 5.33
	17700.00	90.16	181.12	9177.36	8348.55	-8281.57	-2880.91	0.00	389962.17	551164.35	N 32 4 19.25	W 104 10 5.36
	17800.00	90.16	181.12	9177.08	8448.55	-8381.55	-2882.86	0.00	389862.20	551162.40	N 32 4 18.26	W 104 10 5.38
	17900.00	90.16	181.12	9176.80	8548.55	-8481.53	-2884.82	0.00	389762.23	551160.44	N 32 4 17.27	W 104 10 5.41
	18000.00	90.16	181.12	9176.52	8648.55	-8581.51	-2886.77	0.00	389662.25	551158.49	N 32 4 16.28	W 104 10 5.43
	18100.00	90.16	181.12	9176.24	8748.55	-8681.50	-2888.72	0.00	389562.28	551156.54	N 32 4 15.29	W 104 10 5.46
	18200.00	90.16	181.12	9175.96	8848.55	-8781.48	-2890.67	0.00	389462.31	551154.58	N 32 4 14.30	W 104 10 5.48
	18300.00	90.16	181.12	9175.68	8948.54	-8881.46	-2892.63	0.00	389362.34	551152.63	N 32 4 13.31	W 104 10 5.51
	18400.00	90.16	181.12	9175.40	9048.54	-8981.44	-2894.58	0.00	389262.37	551150.68	N 32 4 12.32	W 104 10 5.53
	18500.00	90.16	181.12	9175.12	9148.54	-9081.42	-2896.53	0.00	389162.40	551148.73	N 32 4 11.34	W 104 10 5.55
	18600.00	90.16	181.12	9174.84	9248.54	-9181.40	-2898.49	0.00	389062.42	551146.77	N 32 4 10.35	W 104 10 5.58
	18700.00	90.16	181.12	9174.56	9348.54	-9281.38	-2900.44	0.00	388962.45	551144.82	N 32 4 9.36	W 104 10 5.60
	18800.00	90.16	181.12	9174.28	9448.54	-9381.36	-2902.39	0.00	388862.48	551142.87	N 32 4 8.37	W 104 10 5.63
	18900.00	90.16	181.12	9174.00	9548.54	-9481.34	-2904.34	0.00	388762.51	551140.92	N 32 4 7.38	W 104 10 5.65
	19000.00	90.16	181.12	9173.72	9648.53	-9581.32	-2906.30	0.00	388662.54	551138.96	N 32 4 6.39	W 104 10 5.68
	19100.00	90.16	181.12	9173.44	9748.53	-9681.30	-2908.25	0.00	388562.57	551137.01	N 32 4 5.40	W 104 10 5.70
	19200.00	90.16	181.12	9173.16	9848.53	-9781.28	-2910.20	0.00	388462.59	551135.06	N 32 4 4.41	W 104 10 5.73
	19300.00	90.16	181.12	9172.88	9948.53	-9881.26	-2912.16	0.00	388362.62	551133.10	N 32 4 3.42	W 104 10 5.75
	19400.00	90.16	181.12	9172.60	10048.53	-9981.24	-2914.11	0.00	388262.65	551131.15	N 32 4 2.43	W 104 10 5.77
	19500.00	90.16	181.12	9172.32	10148.53	-10081.22	-2916.06	0.00	388162.68	551129.20	N 32 4 1.44	W 104 10 5.80
	19600.00	90.16	181.12	9172.04	10248.53	-10181.20	-2918.02	0.00	388062.71	551127.25	N 32 4 0.45	W 104 10 5.82
	19700.00	90.16	181.12	9171.76	10348.52	-10281.18	-2919.97	0.00	387962.74	551125.29	N 32 3 59.46	W 104 10 5.85
	19800.00	90.16	181.12	9171.48	10448.52	-10381.16	-2921.92	0.00	387862.77	551123.34	N 32 3 58.47	W 104 10 5.87
	19900.00	90.16	181.12	9171.20	10548.52	-10481.15	-2923.87	0.00	387762.79	551121.39	N 32 3 57.48	W 104 10 5.90
	20000.00	90.16	181.12	9170.92	10648.52	-10581.13	-2925.83	0.00	387662.82	551119.44	N 32 3 56.49	W 104 10 5.92
	20100.00	90.16	181.12	9170.64	10748.52	-10681.11	-2927.78	0.00	387562.85	551117.48	N 32 3 55.51	W 104 10 5.95
	20200.00	90.16	181.12	9170.37	10848.52	-10781.09	-2929.73	0.00	387462.88	551115.53	N 32 3 54.52	W 104 10 5.97
	20300.00	90.16	181.12	9170.09	10948.52	-10881.07	-2931.69	0.00	387362.91	551113.58	N 32 3 53.53	W 104 10 5.99
	20400.00	90.16	181.12	9169.81	11048.51	-10981.05	-2933.64	0.00	387262.94	551111.62	N 32 3 52.54	W 104 10 6.02
	20500.00	90.16	181.12	9169.53	11148.51	-11081.03	-2935.59	0.00	387162.96	551109.67	N 32 3 51.55	W 104 10 6.04
LTP Cross	*20563.18*	*90.16*	*181.12*	*9169.35*	*11211.70*	*-11144.20*	*-2936.83*	*0.00*	*387099.80*	*551108.44*	*N 32 3 50.92*	*W 104 10 6.06*
	20600.00	90.16	181.12	9169.25	11248.51	-11181.01	-2937.54	0.00	387062.99	551107.72	N 32 3 50.56	W 104 10 6.07
Cicada Unit 33H - PBHL	20688.02	90.16	181.12	9169.00	11336.53	-11269.01	-2939.26	0.00	386975.00	551106.00	N 32 3 49.69	W 104 10 6.09

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 3 *** 3-D 97.071% Confidence 3.0000 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM-Depth Only	Cicada Unit 033H / Chevron Cicada Unit 33H R3 mdv 01Oct20
	1	28.000	450.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM	Cicada Unit 033H / Chevron Cicada Unit 33H R3 mdv 01Oct20
	1	450.000	2332.909	1/100.000	12.250	9.625		B001Mb_MWD+HRGM	Cicada Unit 033H / Chevron Cicada Unit 33H R3 mdv 01Oct20
	1	2332.909	8777.169	1/100.000	8.750	7.000		B001Mb_MWD+HRGM	Cicada Unit 033H / Chevron Cicada Unit 33H R3 mdv 01Oct20
	1	8777.169	20688.018	1/100.000	6.125	4.500		B001Mb_MWD+HRGM	Cicada Unit 033H / Chevron Cicada Unit 33H R3 mdv 01Oct20