Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-045-38456

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval 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.
Conditions of approval, if any, are attached.

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 05/21/2025

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 05/21/2025

Additional Operator Remarks

Location of Well

0. SHL: SESE / 481 FSL / 887 FEL / TWSP: 31N / RANGE: 7W / SECTION: 11 / LAT: 36.9081041 / LONG: -107.534346 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 1314 FSL / 0 FEL / TWSP: 31N / RANGE: 7W / SECTION: 9 / LAT: 36.9103023 / LONG: -107.5673944 (TVD: 7228 feet, MD: 15900 feet)

PPP: SESE / 1314 FSL / 0 FEL / TWSP: 31N / RANGE: 7W / SECTION: 10 / LAT: 36.910504 / LONG: -107.549371 (TVD: 7233 feet, MD: 10620 feet)

PPP: SWSW / 1314 FSL / 1320 FWL / TWSP: 31N / RANGE: 7W / SECTION: 11 / LAT: 36.9103741 / LONG: -107.5448396 (TVD: 7234 feet, MD: 9300 feet)

PPP: SWSE / 1309 FSL / 2369 FEL / TWSP: 31N / RANGE: 7W / SECTION: 11 / LAT: 36.9103691 / LONG: -107.5394103 (TVD: 7235 feet, MD: 7709 feet)

BHL: NWSW / 1320 FSL / 290 FWL / TWSP: 31N / RANGE: 7W / SECTION: 9 / LAT: 36.9104032 / LONG: -107.5844046 (TVD: 7224 feet, MD: 20863 feet)

BLM Point of Contact

Name: JEFFREY J TAFOYA
Title: Assistant Field Manager
Phone: (505) 564-7672
Email: JTAFOYA@BLM.GOV

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
SIMCOE LLC 1199 MAIN AVE., STE #101, DURANGO, CO 81301	329736
	3. API Number

4. Property Code	5. Property Name	6. Well No.
	NORTHEAST BLANCO UNIT 605 COM	4H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	11	31N	7W		481	S	887	E	SAN JUAN

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
L	9	31N	7W		1320	S	290	W	SAN JUAN

9. Pool Information

Pool Name	Pool Code
BASIN MANCOS	97232

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	O	R	FED	6471'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
NO	7235' TVD	MANCOS SHALE	TBD	TBD

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
300'	0.5 MILES	0.7 MILES

☒**We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURFACE	17-1/2"	13-3/8"	54.50	0'-1100' MD	980	0'
INTERMEDIATE	12-1/2"	9-5/8"	40.00	0'-6374' MD	1285	0'
PRODUCTION	8-3/4"	5-1/2"	20.00	0'-20,863' MD	4215	5270'

Casing/Cement Program: Additional Comments

CONDUCTOR, 26" HOLE, 20" CASING, 94.00 CASING WEIGHT,150' MD, 385SX, 0' TOC

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
13-5/8" CLASS 3ARR 5M BOP	1500 PSI	250 psi (Low) - 5000 psi (High)	CAMERON

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:	OIL CONSERVATION DIVISION Approved By:
Printed name: Cale Redpath	Title:
Title: REGULATORY ANALYST	Approved Date: / Expiration Date:
E-mail Address: caleredpath@ikavenergy.com	
Date: 5/22/2025 / Phone: 970-852-5154	Conditions of Approval Attached

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-045-38456	97232	BASIN MANCOS

Property Code	Property Name	Well Number
327856	NORTHEAST BLANCO UNIT 605 COM	4H

OGRID No.	Operator Name	Ground Level Elevation
329736	SIMCOE LLC	6470.8

Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	11	31 N	7 W		481 FSL	887 FEL	36.9081041° N	107.5343460° W	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	9	31 N	7 W		1320 FSL	290 FWL	36.9104032° N	107.5844046° W	SAN JUAN

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
SEC. 10: S 1/2, SEC. 9: S 1/2, SEC 11: S 1/2 TOTAL ACRES = 960			N	

Order Numbers.

Well setbacks are under Common Ownership: ☐ Yes ☒ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	11	31 N	7 W		481 FSL	887 FEL	36.9081041° N	107.5343460° W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	11	31 N	7 W		1309 FSL	2369 FEL	36.9103691° N	107.5394103° W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	9	31 N	7 W		1320 FSL	370 FWL	36.9104030° N	107.5841309° W	SAN JUAN

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division

Cale Redpath

Signature

CALE REDPATH

Printed Name

cale.redpath@ikavenergy.com

E-mail Address

SURVEYOR CERTIFICATIONS

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. I further certify that United Field Services, Inc., located at 21 Road 3520 in Flora Vista, New Mexico is the company providing this information.

JOHN A VUKONICH NEW MEXICO 14831 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Field Survey	Date of Certification
14831	6/13/22	7/2/2025

Note: 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.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

United Field Services, Inc., located at 21 Road 3520, Flora Vista, New Mexico, is the company providing this plat.

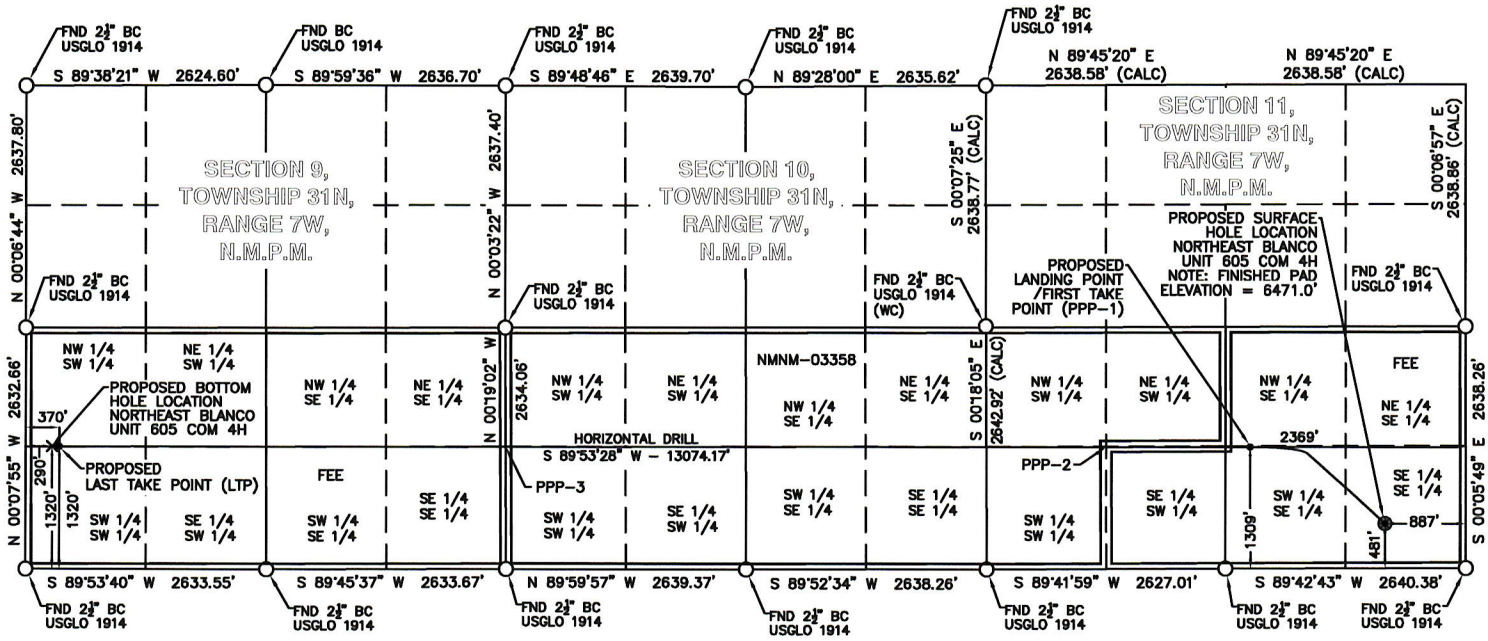
PLAT REVISED: 6/26/25

UFSI PROJECT NO. 11683

LEGEND
FOUND MONUMENT O
PROPOSED SURFACE HOLE LOCATION ⊛
PROPOSED BOTTOM HOLE LOCATION ×

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NAD 83, UNLESS OTHERWISE NOTED

NOTE:
DOWNHOLE INFORMATION TAKEN FROM A REPORT FURNISHED BY IKAV ENERGY DATED 6/20/2022



NORTHEAST BLANCO UNIT 605 COM 4H	NMWZ NAD'83	NAD'83	TIES	SECTION
PROPOSED SURFACE HOLE LOCATION (SHL)	N (Y) = 2,150,013.67' E (X) = 2,810,503.47'	LAT. = 36.9081041°N LON.= 107.5343460°W	FSL = 481' FEL = 887'	11
PROPOSED LANDING POINT / FIRST TAKE POINT (PPP-1)	N (Y) = 2,150,833.66' E (X) = 2,809,020.31'	LAT. = 36.9103691°N LON.= 107.5394103°W	FSL = 1309' FEL = 2369'	11
PPP-2	N (Y) = 2,150,830.65' E (X) = 2,807,433.42'	LAT. = 36.9103741°N LON.= 107.5448383°W	FSL = 1314' FWL = 1316'	11
PPP-3	N (Y) = 2,150,818.12' E (X) = 2,800,839.11'	LAT. = 36.9103923°N LON.= 107.5673944°W	FSL = 1314' FEL = 0'	9
PROPOSED LAST TAKE POINT (LTP)	N (Y) = 2,150,808.81' E (X) = 2,795,946.16'	LAT. = 36.9104030°N LON.= 107.5841309°W	FSL = 1320' FWL = 370'	9
PROPOSED BOTTOM HOLE LOCATION (BHL)	N (Y) = 2,150,808.66' E (X) = 2,795,866.16'	LAT. = 36.9104032°N LON.= 107.5844046°W	FSL = 1320' FWL = 290'	9

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: SIMCOE, LLC **OGRID:** 329739 **Date:** 09/02/2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
NEBU 605 Com Pad	TBA	P-11-31N-07W	504 FSL			
(3H, 4H, 5H)			& 874 FEL			

IV. Central Delivery Point Name: Harvest [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
NEBU 605 Com Pad	TBA					
(3H, 4H, 5H)						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	Julie Best
Printed Name:	Julie Best
Title:	HSE Manager Operations
E-mail Address:	julie.best@ikavenergy.com
Date:	9/2/2022
Phone:	970-822-8924

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

SECTION 3: CASING

BIT & CASING PROGRAM (all new casing strings)

TYPE	HOLE SIZE (IN)	CASING (IN)	WEIGHT (LBS/FT)	GRADE	COUPLING	SETTING DEPTH (MD FT)	COMMENTS
Conductor	26	20	94.00	J55	BT&C	0-150	New casing. May be pre-set. Cement circulated to surface.
Surface	17-1/2	13-3/8	54.50	J55	BT&C	0-1100	New casing. May be pre-set. Cement circulated to surface.
Intermediate	12-1/4	9-5/8	40.00	P110HC	BT&C	0-6374	New casing. Three-stage cement job, circulated to surface.
Production	8-3/4	5-1/2	20.00	P110HC	GBCD	0-20,863	New casing. Single-stage cement job to overlap previous casing shoe.

Design Factor Tables

Conductor Casing Design - Evacuation/Casing Test (collapse & burst), 100K overpull (tension)

					Collapse (psi)	Burst (psi)	Tension (lbs)	
				Minimum Safety Factors	1.125	1.100	1.400	
	Size (in.)	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Yield - Body (lbs)	Yield - Connection (lbs)
Conductor	20	94	J55	BTC	520	2,110	1,480,000	1,402,000
					80% of Burst =	***1,688***		

	Casing Depth, TVD (ft)	Mud Wt In (ppg)	Mud Wt Out (ppg)	Pressure Inside (psi)	Pressure Outside (psi)	Safety Factor	
Collapse	150	0	8.33	0	65	8.00	
Burst	150	8.33	0	1500	0	1.35	1500 psi casing test

	Casing Depth, TVD (ft)	Mud Wt (ppg)	Air Wt (lbs)	Bouyant Wt (lbs)	Bouyant Wt + 100K (lbs)		
Tension (Pipe Body)	150	9.00	14,100	12,163	112,163	13.20	100K lbs overpull
Tension (Connection)	150	9.00	14,100	12,163	112,163	12.50	

NOTE: BF = 1-((MW)/65.5)

Surface Casing Design - Evacuation/Casing Test (collapse & burst), 100K overpull (tension)

					Collapse (psi)	Burst (psi)	Tension (lbs)	
				Minimum Safety Factors	1.125	1.100	1.400	
	Size (in.)	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Yield - Body (lbs)	Yield - Connection (lbs)
Surface	13.375	54.50	K55	BTC	1,130	2,730	850,000	1,038,000
					80% of Burst =	*2,184*		

	Casing Depth, TVD (ft)	Mud Wt In (ppg)	Mud Wt Out (ppg)	Pressure Inside (psi)	Pressure Outside (psi)	Safety Factor	
Collapse	1100	0	9.00	0	515	2.20	Full evacuation with 9.0 ppg mud in annulus
Burst	1100	9.00	0	1500	0	1.35	1500 psi casing test

	Casing Depth, TVD (ft)	Mud Wt (ppg)	Air Wt (lbs)	Bouyant Wt (lbs)	Bouyant Wt + 100K (lbs)		
Tension (Pipe Body)	1100	9.00	59,950	51,713	151,713	5.60	100K lbs overpull
Tension (Connection)	1100	9.00	59,950	51,713	151,713	6.84	

NOTE: BF = 1-((MW)/65.5)

Intermediate Casing Design - Evacuation/Casing Test (collapse & burst), 100K overpull (tension)

					Collapse (psi)	Burst (psi)	Tension (lbs)	
				Minimum Safety Factors	1.125	1.100	1.400	
	Size (in.)	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Yield - Body (lbs)	Yield - Connection (lbs)
Surface	9.625	40.00	P110HC	BTC	4,230	7,910	1,260,000	1,266,000
					80% of Burst =	*6,328*		

	Casing Depth, TVD (ft)	Mud Wt In (ppg)	Mud Wt Out (ppg)	Pressure Inside (psi)	Pressure Outside (psi)	Safety Factor	
Collapse	6276	0	10.00	0	3264	1.30	Full evacuation with 10.0 ppg mud in annulus
Burst	6276	10.00	0	1500	0	1.66	1500 psi casing test

	Casing Depth, TVD (ft)	Mud Wt (ppg)	Air Wt (lbs)	Bouyant Wt (lbs)	Bouyant Wt + 100K (lbs)		
Tension (Pipe Body)	6276	10.00	251,040	212,713	312,713	4.03	100K lbs overpull
Tension (Connection)	6276	10.00	251,040	212,713	312,713	4.05	

NOTE: BF = 1-((MW)/65.5)

Production Casing Design - Evacuation/Casing Test (collapse & burst), 100K overpull (tension)

					Collapse (psi)	Burst (psi)	Tension (lbs)	
				Minimum Safety Factors	1.125	1.100	1.400	
	Size (in.)	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Yield - Body (lbs)	Yield - Connection (lbs)
Surface	5.5	20.00	P110HC	GBCD	13,300	12,640	641,000	891,000
					80% of Burst =	***10,112***		

	Casing Depth, TVD (ft)	Mud Wt In (ppg)	Mud Wt Out (ppg)	Pressure Inside (psi)	Pressure Outside (psi)	Safety Factor	
Collapse	7235	0	13.30	0	5004	2.66	Full evacuation with 13.3 ppg mud in annulus
Burst	7235	13.30	0	1500	0	1.94	1500 psi casing test

	Casing Depth, TVD (ft)	Mud Wt (ppg)	Air Wt (lbs)	Bouyant Wt (lbs)	Bouyant Wt + 100K (lbs)		
Tension (Pipe Body)	7235	13.30	144,700	115,318	215,318	2.98	100K lbs overpull
Tension (Connection)	7235	13.30	144,700	115,318	215,318	4.14	

NOTE: BF = 1-((MW)/65.5)

All casing strings (including conductor) will be tested to 0.22 psi/ft of string length or 1500 psi (whichever is greater), but not to exceed 70% of minimum internal yield.

Minimum casing design safety factors:

Collapse – 1.125
Burst – 1.100
Tension – 1.400

Casing centralization:

Surface Casing – Centralizers to be placed on bottom 4 joints of casing (1 per joint) and 1 every 3rd joint thereafter to surface.

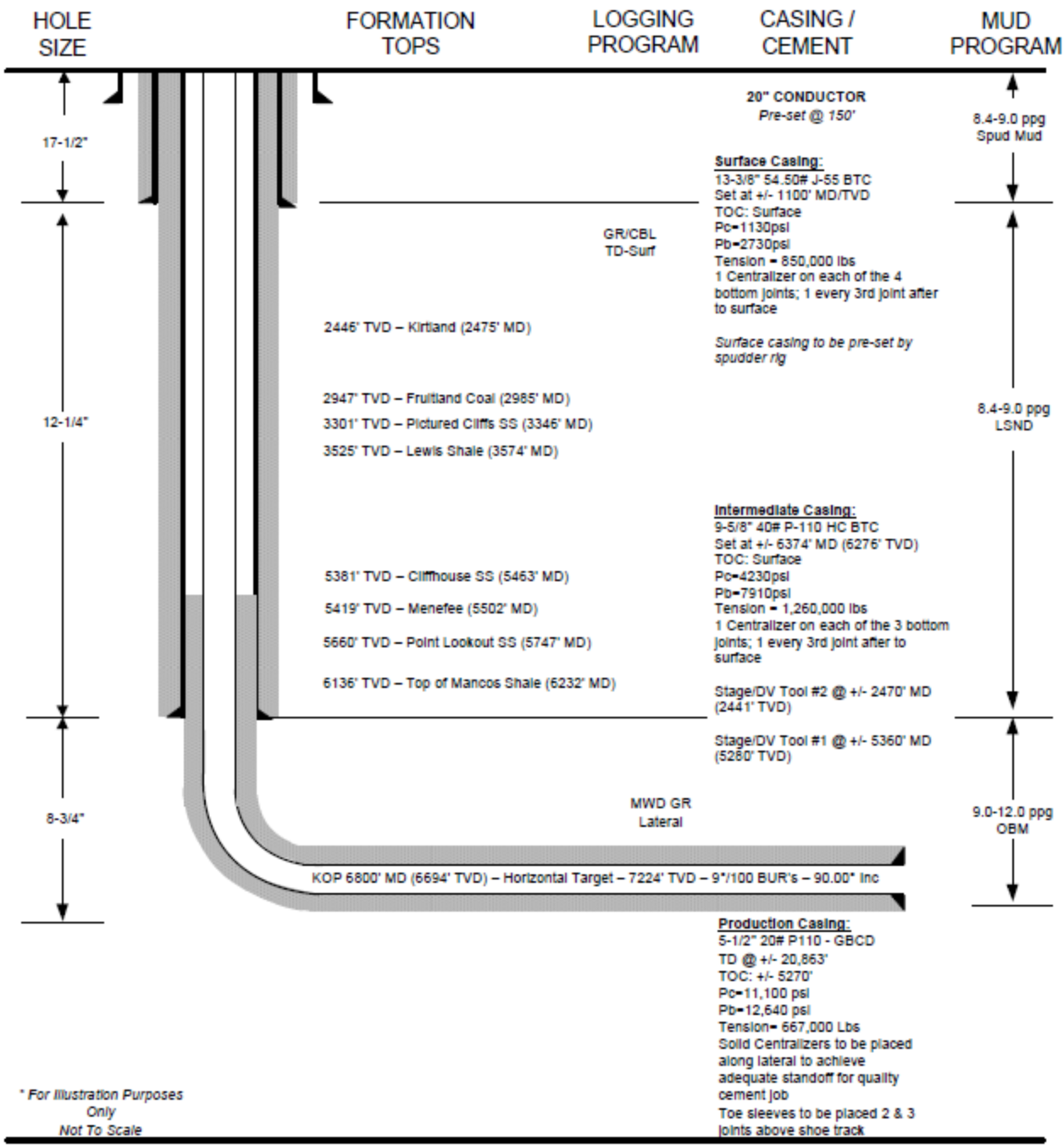
Intermediate Casing – Centralizers to be placed on bottom 3 joints of casing (1 per joint) and 1 every 3rd joint thereafter to surface. A DV tool and external casing packer (ECP) may be placed at roughly 2470' & 5360' MD, if necessary. *

Production Casing – Centralizers to be placed along lateral to achieve adequate standoff for quality cement job. Toe sleeves (2) will be placed 2 and 3 joints above the shoe track.

**NOTE: Use of the DV tool and ECP will be based on the magnitude of drilling fluid losses encountered while drilling the Intermediate section and concerns about cement possibly not being circulated to surface. Should heavy losses not be encountered, the DV tool and ECP will not be used.*

Wellbore Schematic

WELL: Northeast Blanco Unit 605 COM 4H
PROSPECT: San Juan Basin – Mancos Shale (S1/Olive)
CATEGORY: Horizontal Well
COUNTY: San Juan County STATE: New Mexico
API #: TBD



IKAV

Company: IKAV Energy
Project: San Juan County, NM NAD83
Site: NEBU 605 Pad
Well: NEBU 605 4H
Wellbore: OH
Design: Plan #2

PROJECT DETAILS: San Juan County, NM NAD83

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

Scientific Drilling

WELL DETAILS: NEBU 605 4H

GL 6471' & RKB 25' @ 6496.00usft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	2150013.66	2810503.46	36.9081041	-107.5343460	2

Plan: Plan #2 (NEBU 605 4H/OH)

Created By: Janie Collins Date: 17:23, June 20 2022

Azimuths to Grid North
True North: -0.[illegible]°
Magnetic North: 8.[illegible]°

Magnetic Field
Strength: 49566.[illegible]nT
Dip Angle: 63.[illegible]°
Date: 5/19/2[illegible]
Model: HDGM2[illegible]

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
NEBU 605 4H LP Rev	7235.00	820.00	-1483.16	2150833.66	2809020.31	36.9103691	-107.5394104
NEBU 605 4H BHL Rev	7224.00	795.00	-14637.30	2150808.66	2795866.16	36.9104032	-107.5844045

SECTION DETAILS

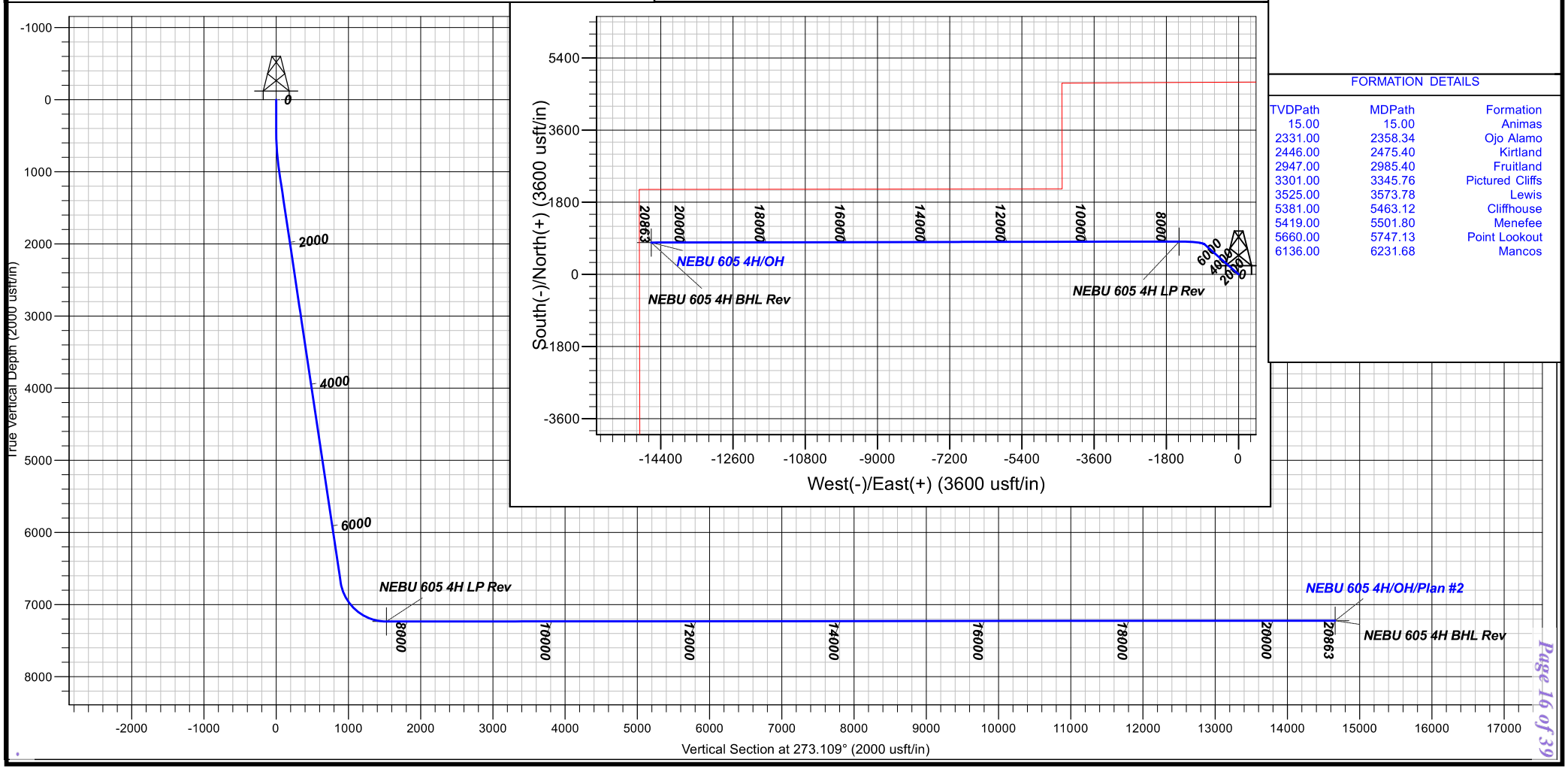
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00
988.95	10.78	311.448	985.78	33.46	-37.89	2.00	311.45	39.65
6797.46	10.78	311.448	6691.80	752.54	-852.15	0.00	0.00	891.70
7708.60	90.05	269.891	7235.00	820.00	-1483.16	9.00	-42.06	1525.45
20862.77	90.05	269.891	7224.00	795.00	-14637.30	0.00	0.00	14658.87

CASING DETAILS

No casing data is available

FORMATION DETAILS

TVDPath	MDPath	Formation
15.00	15.00	Animas
2331.00	2358.34	Ojo Alamo
2446.00	2475.40	Kirtland
2947.00	2985.40	Fruitland
3301.00	3345.76	Pictured Cliffs
3525.00	3573.78	Lewis
5381.00	5463.12	Cliffhouse
5419.00	5501.80	Menefee
5660.00	5747.13	Point Lookout
6136.00	6231.68	Mancos



IKAV Energy

San Juan County, NM NAD83
NEBU 605 Pad
NEBU 605 4H - Slot 2

OH

Plan: Plan #2

Standard Planning Report

20 June, 2022

Scientific Drilling

www.scientificdrilling.com

IKAV

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Project San Juan County, NM NAD83

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site NEBU 605 Pad

Site Position:		**Northing:**	2,149,972.24 usft	**Latitude:**	36.9079896
From:	Map	**Easting:**	2,810,585.35 usft	**Longitude:**	-107.5340664
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.18 °

Well NEBU 605 4H - Slot 2

Well Position	**+N/-S**	41.42 usft	**Northing:**	2,150,013.66 usft	**Latitude:**	36.9081041
	+E/-W	-81.89 usft	**Easting:**	2,810,503.47 usft	**Longitude:**	-107.5343460
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	6,471.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	5/19/2022	8.72	63.33	49,566.00000000

Design Plan #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	273.109

Plan 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
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00	
988.95	10.78	311.448	985.78	33.46	-37.89	2.00	2.00	0.00	311.45	
6,797.46	10.78	311.448	6,691.80	752.54	-852.15	0.00	0.00	0.00	0.00	
7,708.60	90.05	269.891	7,235.00	820.00	-1,483.16	9.00	8.70	-4.56	-42.06	NEBU 605 4H LP Rev
20,862.77	90.05	269.891	7,224.00	795.00	-14,637.30	0.00	0.00	0.00	0.00	NEBU 605 4H BHL Rev

IKAV

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	1.00	311.448	500.00	0.29	-0.33	0.34	2.00	2.00	0.00
600.00	3.00	311.448	599.93	2.60	-2.94	3.08	2.00	2.00	0.00
700.00	5.00	311.448	699.68	7.22	-8.17	8.55	2.00	2.00	0.00
800.00	7.00	311.448	799.13	14.13	-16.01	16.75	2.00	2.00	0.00
900.00	9.00	311.448	898.15	23.35	-26.44	27.66	2.00	2.00	0.00
988.95	10.78	311.448	985.78	33.46	-37.89	39.65	2.00	2.00	0.00
1,000.00	10.78	311.448	996.63	34.83	-39.44	41.27	0.00	0.00	0.00
1,100.00	10.78	311.448	1,094.87	47.21	-53.46	55.94	0.00	0.00	0.00
1,200.00	10.78	311.448	1,193.10	59.59	-67.47	70.61	0.00	0.00	0.00
1,300.00	10.78	311.448	1,291.34	71.97	-81.49	85.27	0.00	0.00	0.00
1,400.00	10.78	311.448	1,389.57	84.35	-95.51	99.94	0.00	0.00	0.00
1,500.00	10.78	311.448	1,487.81	96.73	-109.53	114.61	0.00	0.00	0.00
1,600.00	10.78	311.448	1,586.04	109.11	-123.55	129.28	0.00	0.00	0.00
1,700.00	10.78	311.448	1,684.28	121.49	-137.57	143.95	0.00	0.00	0.00
1,800.00	10.78	311.448	1,782.52	133.86	-151.58	158.62	0.00	0.00	0.00
1,900.00	10.78	311.448	1,880.75	146.24	-165.60	173.29	0.00	0.00	0.00
2,000.00	10.78	311.448	1,978.99	158.62	-179.62	187.96	0.00	0.00	0.00
2,100.00	10.78	311.448	2,077.22	171.00	-193.64	202.63	0.00	0.00	0.00
2,200.00	10.78	311.448	2,175.46	183.38	-207.66	217.30	0.00	0.00	0.00
2,300.00	10.78	311.448	2,273.69	195.76	-221.68	231.97	0.00	0.00	0.00
2,400.00	10.78	311.448	2,371.93	208.14	-235.69	246.64	0.00	0.00	0.00
2,500.00	10.78	311.448	2,470.17	220.52	-249.71	261.30	0.00	0.00	0.00
2,600.00	10.78	311.448	2,568.40	232.90	-263.73	275.97	0.00	0.00	0.00
2,700.00	10.78	311.448	2,666.64	245.28	-277.75	290.64	0.00	0.00	0.00
2,800.00	10.78	311.448	2,764.87	257.66	-291.77	305.31	0.00	0.00	0.00
2,900.00	10.78	311.448	2,863.11	270.04	-305.79	319.98	0.00	0.00	0.00
3,000.00	10.78	311.448	2,961.34	282.42	-319.80	334.65	0.00	0.00	0.00
3,100.00	10.78	311.448	3,059.58	294.80	-333.82	349.32	0.00	0.00	0.00
3,200.00	10.78	311.448	3,157.81	307.18	-347.84	363.99	0.00	0.00	0.00
3,300.00	10.78	311.448	3,256.05	319.56	-361.86	378.66	0.00	0.00	0.00
3,400.00	10.78	311.448	3,354.29	331.94	-375.88	393.33	0.00	0.00	0.00
3,500.00	10.78	311.448	3,452.52	344.32	-389.90	408.00	0.00	0.00	0.00
3,600.00	10.78	311.448	3,550.76	356.70	-403.91	422.67	0.00	0.00	0.00
3,700.00	10.78	311.448	3,648.99	369.08	-417.93	437.33	0.00	0.00	0.00
3,800.00	10.78	311.448	3,747.23	381.46	-431.95	452.00	0.00	0.00	0.00
3,900.00	10.78	311.448	3,845.46	393.84	-445.97	466.67	0.00	0.00	0.00
4,000.00	10.78	311.448	3,943.70	406.22	-459.99	481.34	0.00	0.00	0.00
4,100.00	10.78	311.448	4,041.93	418.60	-474.01	496.01	0.00	0.00	0.00
4,200.00	10.78	311.448	4,140.17	430.98	-488.02	510.68	0.00	0.00	0.00
4,300.00	10.78	311.448	4,238.41	443.36	-502.04	525.35	0.00	0.00	0.00
4,400.00	10.78	311.448	4,336.64	455.74	-516.06	540.02	0.00	0.00	0.00
4,500.00	10.78	311.448	4,434.88	468.12	-530.08	554.69	0.00	0.00	0.00
4,600.00	10.78	311.448	4,533.11	480.50	-544.10	569.36	0.00	0.00	0.00
4,700.00	10.78	311.448	4,631.35	492.88	-558.12	584.03	0.00	0.00	0.00
4,800.00	10.78	311.448	4,729.58	505.26	-572.13	598.69	0.00	0.00	0.00
4,900.00	10.78	311.448	4,827.82	517.64	-586.15	613.36	0.00	0.00	0.00
5,000.00	10.78	311.448	4,926.05	530.02	-600.17	628.03	0.00	0.00	0.00
5,100.00	10.78	311.448	5,024.29	542.40	-614.19	642.70	0.00	0.00	0.00

IKAV

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
5,200.00	10.78	311.448	5,122.53	554.78	-628.21	657.37	0.00	0.00	0.00
5,300.00	10.78	311.448	5,220.76	567.16	-642.23	672.04	0.00	0.00	0.00
5,400.00	10.78	311.448	5,319.00	579.54	-656.25	686.71	0.00	0.00	0.00
5,500.00	10.78	311.448	5,417.23	591.92	-670.26	701.38	0.00	0.00	0.00
5,600.00	10.78	311.448	5,515.47	604.30	-684.28	716.05	0.00	0.00	0.00
5,700.00	10.78	311.448	5,613.70	616.68	-698.30	730.72	0.00	0.00	0.00
5,800.00	10.78	311.448	5,711.94	629.06	-712.32	745.39	0.00	0.00	0.00
5,900.00	10.78	311.448	5,810.17	641.44	-726.34	760.06	0.00	0.00	0.00
6,000.00	10.78	311.448	5,908.41	653.82	-740.36	774.72	0.00	0.00	0.00
6,100.00	10.78	311.448	6,006.65	666.19	-754.37	789.39	0.00	0.00	0.00
6,200.00	10.78	311.448	6,104.88	678.57	-768.39	804.06	0.00	0.00	0.00
6,300.00	10.78	311.448	6,203.12	690.95	-782.41	818.73	0.00	0.00	0.00
6,400.00	10.78	311.448	6,301.35	703.33	-796.43	833.40	0.00	0.00	0.00
6,500.00	10.78	311.448	6,399.59	715.71	-810.45	848.07	0.00	0.00	0.00
6,600.00	10.78	311.448	6,497.82	728.09	-824.47	862.74	0.00	0.00	0.00
6,700.00	10.78	311.448	6,596.06	740.47	-838.48	877.41	0.00	0.00	0.00
6,797.46	10.78	311.448	6,691.80	752.54	-852.15	891.70	0.00	0.00	0.00
6,800.00	10.95	310.641	6,694.29	752.85	-852.51	892.08	9.00	6.72	-31.74
6,900.00	18.67	291.840	6,790.95	765.02	-874.62	914.82	9.00	7.72	-18.80
7,000.00	27.17	284.137	6,882.99	776.57	-911.70	952.47	9.00	8.50	-7.70
7,100.00	35.91	279.941	6,968.14	787.24	-962.83	1,004.11	9.00	8.73	-4.20
7,200.00	44.74	277.219	7,044.32	796.74	-1,026.76	1,068.46	9.00	8.83	-2.72
7,300.00	53.61	275.237	7,109.63	804.85	-1,101.91	1,143.93	9.00	8.87	-1.98
7,400.00	62.51	273.664	7,162.48	811.38	-1,186.43	1,228.68	9.00	8.90	-1.57
7,500.00	71.43	272.329	7,201.57	816.15	-1,278.24	1,320.62	9.00	8.92	-1.34
7,600.00	80.35	271.127	7,225.92	819.05	-1,375.08	1,417.47	9.00	8.92	-1.20
7,700.00	89.28	269.988	7,234.95	820.01	-1,474.56	1,516.86	9.00	8.93	-1.14
7,708.60	90.05	269.891	7,235.00	820.00	-1,483.16	1,525.45	9.00	8.93	-1.13
7,800.00	90.05	269.891	7,234.92	819.83	-1,574.56	1,616.70	0.00	0.00	0.00
7,900.00	90.05	269.891	7,234.84	819.64	-1,674.56	1,716.55	0.00	0.00	0.00
8,000.00	90.05	269.891	7,234.76	819.45	-1,774.56	1,816.39	0.00	0.00	0.00
8,100.00	90.05	269.891	7,234.67	819.26	-1,874.56	1,916.23	0.00	0.00	0.00
8,200.00	90.05	269.891	7,234.59	819.07	-1,974.56	2,016.07	0.00	0.00	0.00
8,300.00	90.05	269.891	7,234.51	818.88	-2,074.56	2,115.92	0.00	0.00	0.00
8,400.00	90.05	269.891	7,234.42	818.69	-2,174.56	2,215.76	0.00	0.00	0.00
8,500.00	90.05	269.891	7,234.34	818.50	-2,274.56	2,315.60	0.00	0.00	0.00
8,600.00	90.05	269.891	7,234.25	818.31	-2,374.56	2,415.44	0.00	0.00	0.00
8,700.00	90.05	269.891	7,234.17	818.12	-2,474.56	2,515.29	0.00	0.00	0.00
8,800.00	90.05	269.891	7,234.09	817.93	-2,574.56	2,615.13	0.00	0.00	0.00
8,900.00	90.05	269.891	7,234.00	817.74	-2,674.56	2,714.97	0.00	0.00	0.00
9,000.00	90.05	269.891	7,233.92	817.55	-2,774.56	2,814.81	0.00	0.00	0.00
9,100.00	90.05	269.891	7,233.84	817.36	-2,874.56	2,914.65	0.00	0.00	0.00
9,200.00	90.05	269.891	7,233.75	817.17	-2,974.56	3,014.50	0.00	0.00	0.00
9,300.00	90.05	269.891	7,233.67	816.98	-3,074.56	3,114.34	0.00	0.00	0.00
9,400.00	90.05	269.891	7,233.59	816.79	-3,174.56	3,214.18	0.00	0.00	0.00
9,500.00	90.05	269.891	7,233.50	816.60	-3,274.56	3,314.02	0.00	0.00	0.00
9,600.00	90.05	269.891	7,233.42	816.41	-3,374.56	3,413.87	0.00	0.00	0.00
9,700.00	90.05	269.891	7,233.33	816.22	-3,474.56	3,513.71	0.00	0.00	0.00
9,800.00	90.05	269.891	7,233.25	816.03	-3,574.56	3,613.55	0.00	0.00	0.00
9,900.00	90.05	269.891	7,233.17	815.84	-3,674.56	3,713.39	0.00	0.00	0.00
10,000.00	90.05	269.891	7,233.08	815.65	-3,774.56	3,813.24	0.00	0.00	0.00
10,100.00	90.05	269.891	7,233.00	815.46	-3,874.55	3,913.08	0.00	0.00	0.00
10,200.00	90.05	269.891	7,232.92	815.27	-3,974.55	4,012.92	0.00	0.00	0.00
10,300.00	90.05	269.891	7,232.83	815.07	-4,074.55	4,112.76	0.00	0.00	0.00

IKAV

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
10,400.00	90.05	269.891	7,232.75	814.88	-4,174.55	4,212.60	0.00	0.00	0.00
10,500.00	90.05	269.891	7,232.67	814.69	-4,274.55	4,312.45	0.00	0.00	0.00
10,600.00	90.05	269.891	7,232.58	814.50	-4,374.55	4,412.29	0.00	0.00	0.00
10,700.00	90.05	269.891	7,232.50	814.31	-4,474.55	4,512.13	0.00	0.00	0.00
10,800.00	90.05	269.891	7,232.42	814.12	-4,574.55	4,611.97	0.00	0.00	0.00
10,900.00	90.05	269.891	7,232.33	813.93	-4,674.55	4,711.82	0.00	0.00	0.00
11,000.00	90.05	269.891	7,232.25	813.74	-4,774.55	4,811.66	0.00	0.00	0.00
11,100.00	90.05	269.891	7,232.16	813.55	-4,874.55	4,911.50	0.00	0.00	0.00
11,200.00	90.05	269.891	7,232.08	813.36	-4,974.55	5,011.34	0.00	0.00	0.00
11,300.00	90.05	269.891	7,232.00	813.17	-5,074.55	5,111.19	0.00	0.00	0.00
11,400.00	90.05	269.891	7,231.91	812.98	-5,174.55	5,211.03	0.00	0.00	0.00
11,500.00	90.05	269.891	7,231.83	812.79	-5,274.55	5,310.87	0.00	0.00	0.00
11,600.00	90.05	269.891	7,231.75	812.60	-5,374.55	5,410.71	0.00	0.00	0.00
11,700.00	90.05	269.891	7,231.66	812.41	-5,474.55	5,510.55	0.00	0.00	0.00
11,800.00	90.05	269.891	7,231.58	812.22	-5,574.55	5,610.40	0.00	0.00	0.00
11,900.00	90.05	269.891	7,231.50	812.03	-5,674.55	5,710.24	0.00	0.00	0.00
12,000.00	90.05	269.891	7,231.41	811.84	-5,774.55	5,810.08	0.00	0.00	0.00
12,100.00	90.05	269.891	7,231.33	811.65	-5,874.55	5,909.92	0.00	0.00	0.00
12,200.00	90.05	269.891	7,231.24	811.46	-5,974.55	6,009.77	0.00	0.00	0.00
12,300.00	90.05	269.891	7,231.16	811.27	-6,074.55	6,109.61	0.00	0.00	0.00
12,400.00	90.05	269.891	7,231.08	811.08	-6,174.55	6,209.45	0.00	0.00	0.00
12,500.00	90.05	269.891	7,230.99	810.89	-6,274.55	6,309.29	0.00	0.00	0.00
12,600.00	90.05	269.891	7,230.91	810.70	-6,374.55	6,409.14	0.00	0.00	0.00
12,700.00	90.05	269.891	7,230.83	810.51	-6,474.55	6,508.98	0.00	0.00	0.00
12,800.00	90.05	269.891	7,230.74	810.32	-6,574.55	6,608.82	0.00	0.00	0.00
12,900.00	90.05	269.891	7,230.66	810.13	-6,674.55	6,708.66	0.00	0.00	0.00
13,000.00	90.05	269.891	7,230.58	809.94	-6,774.55	6,808.50	0.00	0.00	0.00
13,100.00	90.05	269.891	7,230.49	809.75	-6,874.55	6,908.35	0.00	0.00	0.00
13,200.00	90.05	269.891	7,230.41	809.56	-6,974.55	7,008.19	0.00	0.00	0.00
13,300.00	90.05	269.891	7,230.32	809.37	-7,074.55	7,108.03	0.00	0.00	0.00
13,400.00	90.05	269.891	7,230.24	809.18	-7,174.55	7,207.87	0.00	0.00	0.00
13,500.00	90.05	269.891	7,230.16	808.99	-7,274.55	7,307.72	0.00	0.00	0.00
13,600.00	90.05	269.891	7,230.07	808.80	-7,374.55	7,407.56	0.00	0.00	0.00
13,700.00	90.05	269.891	7,229.99	808.61	-7,474.55	7,507.40	0.00	0.00	0.00
13,800.00	90.05	269.891	7,229.91	808.42	-7,574.55	7,607.24	0.00	0.00	0.00
13,900.00	90.05	269.891	7,229.82	808.23	-7,674.55	7,707.09	0.00	0.00	0.00
14,000.00	90.05	269.891	7,229.74	808.04	-7,774.55	7,806.93	0.00	0.00	0.00
14,100.00	90.05	269.891	7,229.66	807.85	-7,874.55	7,906.77	0.00	0.00	0.00
14,200.00	90.05	269.891	7,229.57	807.66	-7,974.55	8,006.61	0.00	0.00	0.00
14,300.00	90.05	269.891	7,229.49	807.47	-8,074.55	8,106.45	0.00	0.00	0.00
14,400.00	90.05	269.891	7,229.40	807.28	-8,174.55	8,206.30	0.00	0.00	0.00
14,500.00	90.05	269.891	7,229.32	807.09	-8,274.55	8,306.14	0.00	0.00	0.00
14,600.00	90.05	269.891	7,229.24	806.90	-8,374.55	8,405.98	0.00	0.00	0.00
14,700.00	90.05	269.891	7,229.15	806.71	-8,474.55	8,505.82	0.00	0.00	0.00
14,800.00	90.05	269.891	7,229.07	806.52	-8,574.54	8,605.67	0.00	0.00	0.00
14,900.00	90.05	269.891	7,228.99	806.33	-8,674.54	8,705.51	0.00	0.00	0.00
15,000.00	90.05	269.891	7,228.90	806.14	-8,774.54	8,805.35	0.00	0.00	0.00
15,100.00	90.05	269.891	7,228.82	805.95	-8,874.54	8,905.19	0.00	0.00	0.00
15,200.00	90.05	269.891	7,228.74	805.76	-8,974.54	9,005.04	0.00	0.00	0.00
15,300.00	90.05	269.891	7,228.65	805.57	-9,074.54	9,104.88	0.00	0.00	0.00
15,400.00	90.05	269.891	7,228.57	805.38	-9,174.54	9,204.72	0.00	0.00	0.00
15,500.00	90.05	269.891	7,228.48	805.19	-9,274.54	9,304.56	0.00	0.00	0.00
15,600.00	90.05	269.891	7,228.40	805.00	-9,374.54	9,404.40	0.00	0.00	0.00
15,700.00	90.05	269.891	7,228.32	804.81	-9,474.54	9,504.25	0.00	0.00	0.00

IKAV

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,800.00	90.05	269.891	7,228.23	804.62	-9,574.54	9,604.09	0.00	0.00	0.00
15,900.00	90.05	269.891	7,228.15	804.43	-9,674.54	9,703.93	0.00	0.00	0.00
16,000.00	90.05	269.891	7,228.07	804.24	-9,774.54	9,803.77	0.00	0.00	0.00
16,100.00	90.05	269.891	7,227.98	804.05	-9,874.54	9,903.62	0.00	0.00	0.00
16,200.00	90.05	269.891	7,227.90	803.86	-9,974.54	10,003.46	0.00	0.00	0.00
16,300.00	90.05	269.891	7,227.82	803.67	-10,074.54	10,103.30	0.00	0.00	0.00
16,400.00	90.05	269.891	7,227.73	803.48	-10,174.54	10,203.14	0.00	0.00	0.00
16,500.00	90.05	269.891	7,227.65	803.29	-10,274.54	10,302.99	0.00	0.00	0.00
16,600.00	90.05	269.891	7,227.56	803.10	-10,374.54	10,402.83	0.00	0.00	0.00
16,700.00	90.05	269.891	7,227.48	802.91	-10,474.54	10,502.67	0.00	0.00	0.00
16,800.00	90.05	269.891	7,227.40	802.72	-10,574.54	10,602.51	0.00	0.00	0.00
16,900.00	90.05	269.891	7,227.31	802.53	-10,674.54	10,702.35	0.00	0.00	0.00
17,000.00	90.05	269.891	7,227.23	802.34	-10,774.54	10,802.20	0.00	0.00	0.00
17,100.00	90.05	269.891	7,227.15	802.15	-10,874.54	10,902.04	0.00	0.00	0.00
17,200.00	90.05	269.891	7,227.06	801.96	-10,974.54	11,001.88	0.00	0.00	0.00
17,300.00	90.05	269.891	7,226.98	801.77	-11,074.54	11,101.72	0.00	0.00	0.00
17,400.00	90.05	269.891	7,226.90	801.58	-11,174.54	11,201.57	0.00	0.00	0.00
17,500.00	90.05	269.891	7,226.81	801.39	-11,274.54	11,301.41	0.00	0.00	0.00
17,600.00	90.05	269.891	7,226.73	801.20	-11,374.54	11,401.25	0.00	0.00	0.00
17,700.00	90.05	269.891	7,226.64	801.01	-11,474.54	11,501.09	0.00	0.00	0.00
17,800.00	90.05	269.891	7,226.56	800.82	-11,574.54	11,600.94	0.00	0.00	0.00
17,900.00	90.05	269.891	7,226.48	800.63	-11,674.54	11,700.78	0.00	0.00	0.00
18,000.00	90.05	269.891	7,226.39	800.44	-11,774.54	11,800.62	0.00	0.00	0.00
18,100.00	90.05	269.891	7,226.31	800.25	-11,874.54	11,900.46	0.00	0.00	0.00
18,200.00	90.05	269.891	7,226.23	800.06	-11,974.54	12,000.30	0.00	0.00	0.00
18,300.00	90.05	269.891	7,226.14	799.87	-12,074.54	12,100.15	0.00	0.00	0.00
18,400.00	90.05	269.891	7,226.06	799.68	-12,174.54	12,199.99	0.00	0.00	0.00
18,500.00	90.05	269.891	7,225.98	799.49	-12,274.54	12,299.83	0.00	0.00	0.00
18,600.00	90.05	269.891	7,225.89	799.30	-12,374.54	12,399.67	0.00	0.00	0.00
18,700.00	90.05	269.891	7,225.81	799.11	-12,474.54	12,499.52	0.00	0.00	0.00
18,800.00	90.05	269.891	7,225.73	798.92	-12,574.54	12,599.36	0.00	0.00	0.00
18,900.00	90.05	269.891	7,225.64	798.73	-12,674.54	12,699.20	0.00	0.00	0.00
19,000.00	90.05	269.891	7,225.56	798.54	-12,774.54	12,799.04	0.00	0.00	0.00
19,100.00	90.05	269.891	7,225.47	798.35	-12,874.54	12,898.89	0.00	0.00	0.00
19,200.00	90.05	269.891	7,225.39	798.16	-12,974.54	12,998.73	0.00	0.00	0.00
19,300.00	90.05	269.891	7,225.31	797.97	-13,074.54	13,098.57	0.00	0.00	0.00
19,400.00	90.05	269.891	7,225.22	797.78	-13,174.54	13,198.41	0.00	0.00	0.00
19,500.00	90.05	269.891	7,225.14	797.59	-13,274.53	13,298.25	0.00	0.00	0.00
19,600.00	90.05	269.891	7,225.06	797.40	-13,374.53	13,398.10	0.00	0.00	0.00
19,700.00	90.05	269.891	7,224.97	797.21	-13,474.53	13,497.94	0.00	0.00	0.00
19,800.00	90.05	269.891	7,224.89	797.02	-13,574.53	13,597.78	0.00	0.00	0.00
19,900.00	90.05	269.891	7,224.81	796.83	-13,674.53	13,697.62	0.00	0.00	0.00
20,000.00	90.05	269.891	7,224.72	796.64	-13,774.53	13,797.47	0.00	0.00	0.00
20,100.00	90.05	269.891	7,224.64	796.45	-13,874.53	13,897.31	0.00	0.00	0.00
20,200.00	90.05	269.891	7,224.55	796.26	-13,974.53	13,997.15	0.00	0.00	0.00
20,300.00	90.05	269.891	7,224.47	796.07	-14,074.53	14,096.99	0.00	0.00	0.00
20,400.00	90.05	269.891	7,224.39	795.88	-14,174.53	14,196.84	0.00	0.00	0.00
20,500.00	90.05	269.891	7,224.30	795.69	-14,274.53	14,296.68	0.00	0.00	0.00
20,600.00	90.05	269.891	7,224.22	795.50	-14,374.53	14,396.52	0.00	0.00	0.00
20,700.00	90.05	269.891	7,224.14	795.31	-14,474.53	14,496.36	0.00	0.00	0.00
20,800.00	90.05	269.891	7,224.05	795.12	-14,574.53	14,596.20	0.00	0.00	0.00
20,862.77	90.05	269.891	7,224.00	795.00	-14,637.30	14,658.87	0.00	0.00	0.00

IKAV

Scientific Drilling
Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well NEBU 605 4H - Slot 2
Company:	IKAV Energy	**TVD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Project:	San Juan County, NM NAD83	**MD Reference:**	GL 6471' & RKB 25' @ 6496.00usft
Site:	NEBU 605 Pad	**North Reference:**	Grid
Well:	NEBU 605 4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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
NEBU 605 4H BHL Rev - plan hits target center - Point	0.00	0.000	7,224.00	795.00	-14,637.30	2,150,808.66	2,795,866.17	36.9104032	-107.5844046
NEBU 605 4H LP Rev - plan hits target center - Point	0.00	0.000	7,235.00	820.00	-1,483.16	2,150,833.66	2,809,020.31	36.9103691	-107.5394104

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
15.00	15.00	Animas		0.00	0.000
2,358.34	2,331.00	Ojo Alamo		0.00	0.000
2,475.40	2,446.00	Kirtland		0.00	0.000
2,985.40	2,947.00	Fruitland		0.00	0.000
3,345.76	3,301.00	Pictured Cliffs		0.00	0.000
3,573.78	3,525.00	Lewis		0.00	0.000
5,463.12	5,381.00	Cliffhouse		0.00	0.000
5,501.80	5,419.00	Menefee		0.00	0.000
5,747.13	5,660.00	Point Lookout		0.00	0.000
6,231.68	6,136.00	Mancos		0.00	0.000

Conditions of Approval

Operator:	SIMCOE LLC
Well Names:	Northeast Blanco Unit (NEBU) 605 Com 003H, 004H & 005H.
Legal Location:	Section 11, Township 31 North, Range 7 West
NEPA Log Number:	DOI-BLM-NM-F010-2025-0010-EA
Inspection Date:	May 17, 2017
Lease Number:	NMNM-03358

The following conditions of approval will apply to SIMCOE LLC Northeast Blanco Unit (NEBU) 605 Com 003H well pad, and other associated facilities, unless a particular Surface Managing Agency or private surface owner has supplied to Bureau of Land Management and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in an assessment or civil penalties pursuant to 43 CFR 3163.1 or 3163.2.

Disclaimers: BLM's approval of the APD does not relieve the lessee and operator from obtaining any other authorizations that may be required by the BIA, Navajo Tribe, State, or other jurisdictional entities.

Copy of Plans: A complete copy of the APD package, including Surface Use Plan of Operations, Bare Soil Reclamation Plan, Plan of Development (if required), Conditions of Approval, Cultural Resource Record of Review, Cultural Resources Compliance Form (if required), and Project Stipulations (if required) shall be at the project area at all times and available to all persons.

Copy of COAs: A copy of these stipulations, including exhibits and the Plan(s) of Operation (if required), shall be on the project area and available to person directing equipment.

Surface Owner: An agreement between the operator and fee land owner will take precedence over BLM surface stipulations unless (In reference to 43 CFR Part 3160) 1) BLM determines that the operator's actions will affect adjacent Federal or Indian surface, or 2) the operator does not maintain well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance, or 3) no such agreement exists, or 4) in the event of well abandonment, minimal Federal restoration requirements will be required. If surface owner changes any stipulations in the conditions of approval, the operator will contact the BLM authorized officer before implementing surface owner stipulation.

Review of NEPA documents: It is the responsibility of the operator to follow all the design features, best management practices, and mitigation measures as contained in the Environmental Assessment DOI-BLM-NM-F010-2025-0010-EA, which contains additional design features and best management practices that must be followed. Copies of the EA, Decision Record, and Finding of No Significant Impact may be obtained from the BLM FFO public room, or online at: eplanning.blm.gov.

Best Management Practices (BMPs): Farmington Field Office established environmental Best Management Practices (BMP's) will be followed during construction and reclamation of well site pads, access roads, pipeline ties, facility placement or any other surface disturbing activity associated with this project. Bureau wide standard BMP's are found in the Gold Book, Fourth Edition-Revised 2007 and at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html. Farmigton Field Office BMPs are integrated into the Environmental Assessment, Surface Use Plan of Operations, Bare Soil Reclamation Plan, and COAs.

Best Management Practices (BMPs): Farmington Field Office established environmental Best Management Practices (BMP's) will be followed during construction and reclamation of well site pads, access roads, pipeline ties, facility placement or any other surface disturbing activity associated with this project. Bureau wide standard BMP's are found in the Gold Book, Fourth Edition-Revised 2007. Farmington Field Office BMP's are integrated into the Environmental Assessment, Surface Use Plan of Operations, Bare Soil Reclamation Plan, and COAs.

Construction, Production, Facilities, Reclamation & Maintenance

Construction & Reclamation Notification: The operator or their contractor will contact the Bureau of Land Management, Farmington Field Office Environmental Protection Staff (505) 564-7600 or by email, at least 48 hours prior to any construction or reclamation on this project.

Production Facilities: Design and layout of facilities will be deferred until an onsite with BLM-FFO surface protection staff is conducted to determine the best location. SIMCOE LLC or their contractor will contact the Bureau of Land Management, Farmington Field Office, Surface, and Environmental Protection Staff (505) 564-7600 to schedule a facility layout onsite.

Staking: The holder shall place slope stakes, culvert location and grade stakes, and other construction control stakes as deemed necessary by the authorized officer to ensure construction in accordance with the plan of development. If stakes are disturbed, they shall be replaced before proceeding with construction.

Weather: No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil shall be deemed too wet.

Stockpile of Soil: The top 6 inches of soil material will be stripped and stockpiled in the construction zones around the pad [construction zones may be restricted or deleted to provide resource avoidance]. The stockpiled soil will be free of brush and tree limbs, trunks, and roots. The stockpiled soil material will be spread on the reclaimed portions of the pad [including the reserve pit, cut and fill slopes] prior to re-seeding. Spreading shall not be done when the ground or topsoil is frozen or wet.

Painting of Equipment: Within 90 days of installation, all above ground structures not subject to safety requirements shall be painted by the Holder to blend with the natural color of the

landscape. A reflective material may be used to reduce hazards that may occur when such structures are near roads. Otherwise, the paint use shall be a non-glare, non-reflective, non-chalking color of: **Juniper Green**.

Grazing Permittee Notification and Concerns: The operator will notify the grazing lease operator(s) at least ten business days prior to beginning any construction activity to ensure there will be no conflicts between construction activities and livestock grazing operations. The operator is not obligated to cease or delay construction unless directed by the AO. Any range improvement (fences, pipelines, ponds, etc.) disturbed by construction activities will be repaired immediately following construction and will be repaired to the condition the improvement was in prior to disturbance. Cattle guards will be installed to replace any livestock fencing or gates removed for road construction.

Cattleguards: Cattle guards shall have grid identification marks welded into them indicating ownership, well name and number associated with the cattle guard, and foundation designs. Construction shall meet the American Association of State Highway and Transportation Officials (AASTHO) load rating H-20, although AASTHO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading) are anticipated. (See BLM standard drawings for cattle guards). Cattle guard grid width shall not be less than eight feet and length of not less than 14 feet. A wire gate with a minimum width of 16 feet will be provided on one side of the cattle guard.

New & Existing Access: All sections of the proposed access road associated with this permit shall be sited, designed, constructed, upgraded and maintained utilizing standards, requirements, guidelines and instructions specified in BLM Manual 9113 “Roads”, BLM Manual 9113-1” Roads Design Handbook”, BLM Manual 9113-2 “Roads National Inventory and Condition Assessment Guidance & Instructions Handbook” and Surface Operations and Guidelines for Oil and Gas Exploration and Development “The Gold Book”.

Storage Tanks: All open top permanent production or storage tanks regardless of diameter made of fiberglass, steel, or other material used for the containment of oil, condensate, produced water and or other production waste shall be screened, netted, or otherwise covered to protect migratory birds and other wildlife from access.

Berms: Berms or firewalls will be constructed around all storage facilities sufficient in size to contain the storage capacity of 110% of the largest tank, or 110% of the combined capacity of tanks if a rupture could drain more than one tank. Berm walls will be compacted with appropriate equipment to assure proper construction. Metal containment barriers, used for secondary containment, will be properly installed, per the manufacturer directions.

Compressors: Compressor units on this well location not equipped with a drip pan for containment of fluids shall be lined with an impervious material at least 8 mils thick and a 12-inch berm. The compressor will be painted to match the well facilities. Any variance to this will be approved by the Authorized Officer (AO). Noise mitigation may be required at the time of compressor installation.

Culverts: Silt Traps/Bell Holes will be built upstream of all culvert locations.

Driving Surface Area: All activities associated within the construction, operation, maintenance, and abandonment of the well location is limited to areas approved in the APD or ROW permit. During the production of the well, vehicular traffic is limited to the daily driving surface area established during interim reclamation construction operations. This area typically forms a keyhole or teardrop driving surface from which all production facilities may be serviced or inspected. A v-type ditch will be constructed on the outside of the driving surface to further define the driving surface and to deter vehicular traffic from entering onto the interim reclamation areas.

Contouring of Cut and Fill Slopes: The interim cut and fill slope grade shall be as close to the original contour as possible. To obtain this ratio, pits and slopes shall be back sloped into the pad during interim reclamation. Only subsurface soil and material shall be utilized in the contouring of the cut and fill slopes. Under no circumstances shall topsoil be utilized as substrate material for contouring of cut and fill slopes.

Seed Mix: The **Pinyon Juniper** community seed mix will be used for interim and final reclamation. The SUPO in the approved APD contains information on the specific seed mix and application rate. Seeding shall be accomplished within 120 days after final construction (time frame may be extended on a case-by-case basis with AO approval). Seeding shall be repeated if a satisfactory stand is not obtained as determined by the AO upon evaluation after the second growing season.

Maintenance: In order to perform subsequent well operations, right-of-way (ROW) operations, or install new/additional equipment, it may be necessary to drive, park, and operate on restored, interim vegetation within the previously disturbed area. This is generally acceptable provided damage is promptly repaired and reclaimed following use. Where vehicular travel has occurred as a "convenience" and interim reclamation/vegetation has been compromised, immediate remediation of the affected areas is required. Additionally, where erosion has occurred and compromised the reclamation of the well location, the affected area must be promptly remediated so that future erosion is prevented, and the landform is stabilized.

Non-Permitted Disturbance: Construction maintenance or any other activity outside the areas permitted by the APO will require additional approval and may require a new cultural survey and clearance.

Layflat Lines: Layflat lines used for development of the wells may be on the ground for a maximum of 6 months and shall be retrieved within 30 days of ending completion operations. If the layflat lines are needed for longer than 6 months or cannot be retrieved within 30 days of ending completion operations, a Sundry NOI shall be submitted to the BLM FFO for review and decision that includes a rationale for the time extension.

"Hotwork" and Construction Affecting Fire Safety: The holder or its contractors will notify the BLM of any fires and comply with all rules and regulations administered by the BLM concerning the use, prevention and suppression of fires on federal lands, including any fire prevention orders that may be in effect at the time of the permitted activity. The holder or its

contractors may be held liable for the cost of fire suppression, stabilization and rehabilitation. In the event of a fire, personal safety will be the first priority of the holder or its contractors. The holder or its contractors shall:

1. Operate all internal and external combustion engines (including off-highway vehicles, chainsaws, generators, heavy equipment, etc.) with a qualified spark arrester. Qualified spark arresters are maintained and not modified, and meet the Society of Automotive Engineers (SAE) Recommended Practices J335 or J350. Refer to 43 CFR §8343.1.
    a. *Refueling of any combustible engine equipment must be minimum of 3 meters away from any ignition source (open flame, smoking, etc.).*
2. Maintain and clean all equipment regularly to remove flammable debris buildup and prevent fluid leaks that can lead to ignitions.
3. Carry at least one shovel or wildland fire hand tool (combi, Pulaski, McLeod) per person working, minimum 5 gallons of water, and a fire extinguisher rated at a minimum as ABC - 10 pound on each piece of equipment and each vehicle.
4. When conducting "hotwork" such as, but not limited to welding, grinding, cutting, spark-producing work with metal, work that creates hot material or slag; choose an area large enough to contain all hot material that is naturally free of all flammable vegetation or remove the flammable vegetation in a manner compliant with the permitted activity. If adequate clearance cannot be made, wet an area large enough to contain all hot material prior to the activity and periodically throughout the activity to reduce the risk of wildfire ignition. Regardless of clearance, maintain readiness to respond to an ignition at all times. In addition, keep one hand tool per person and at least one fire extinguisher ready, minimum, as specified earlier (#3) during this activity.
5. Keep apprised of current and forecasted weather at https://www.weather.gov/abq/forecasts-fireweather-links and fire conditions at www.wfas.net and take additional fire precautions when fire danger is rated High or greater. Red Flag Warnings are issued by the National Weather Service when fire conditions are most dangerous, and ignitions escape control quickly. Extra precautions are required during these warnings such as additional water, designate a fire watch/patrol and tools. If work is being conducted in an area that is not clear of vegetation within 50 feet of work area; then, when fire danger is rated High or greater and 1. There is a predicted Red Flag warning for your area or 2. If winds are predicted to be greater than 10 mph, stop all hotwork activities for the day at 10 am.
6. In the event of an ignition, initiate fire suppression actions in the work area to prevent fire spread to or on federally administered lands. If a fire spreads beyond the capability of workers with the stipulated tools, all will cease fire suppression action and leave the area immediately via pre-identified escape routes.
7. Call **911** or the **Taos Interagency Fire Dispatch Center (575-758-6208)** immediately of the location and status of any fire.

    AND

    Notify the respective BLM field office for which the permit or contract was issued immediately of the incident.
    Farmington Field Office at 505-564-7600
    Taos Field Office at 575-758-8851

Noxious Weeds

Inventory the proposed site for the presence of noxious and invasive weeds. Noxious weeds are those listed on the New Mexico Noxious Weed List and USDA's Federal Noxious Weed List. The New Mexico Noxious Weed List or USDA's Noxious Weed List can be updated at any time and should be regularly check for any changes. Invasive species may or may not be listed as a noxious weed but have been identified to likely cause economic or environmental harm or harm to human health. The following noxious weeds have been identified as occurring on lands within the boundaries of the Farmington Field Office (FFO). There are numerous invasive species on the FFO such as Russian thistle (*Salsola spp.)* and field bindweed (*Convolvulus arvensis*).

Russian Knapweed (*Centaurea repens*)	Musk Thistle (*Carduss nutans*)
Bull Thistle (*Cirsium vulgare*)	Canada Thistle (*Cirsium arvense*)
Scotch Thistle (*Onopordum acanthium)*	Hoary Cress (*Cardaria draba*)
Perennial Pepperweed (*Lepdium latiofolfium*)	Halogeton (*Halogeton glomeratus*)
Spotted Knapweed (*Centaurea maculosa*)	Dalmation Toadflax (*Linaria genistifolia*)
Yellow Toadflax (*Linaria vulgaris*)	Camelthorn (*Alhagi pseudalhagi*)
African Rue (*Penganum harmala*)	Salt Cedar (*Tamarix spp*.)
Diffuse Knapweed (*Centaurea diffusa*)	Leafy Spurge (*Euphorbia esula*)

a. Identified weeds will be treated prior to new surface disturbance if determined by the FFO Noxious Weed Coordinator. A Pesticide Use Proposal (PUP) must be submitted to and approved by the FFO Noxious Weed Coordinator prior to application of pesticide. The FFO Noxious Weeds Coordinator (505-564-7600) can provide assistance in the development of the PUP.
b. Vehicles and equipment should be inspected and cleaned prior to coming onto the work site. This is especially important on vehicles from out of state or if coming from a weed-infested site.
c. Construction equipment should be inspected and cleaned prior to coming onto the work site. This is especially important on vehicles from out of state or if coming from a weed-infested site.
d. Fill dirt or gravel may be needed for excavation, road construction/repair, or for spill remediation. If fill dirt or gravel will be required, the source shall be noxious weed free and approved by the FFO Noxious Weed Coordinator.
e. The site shall be monitored for the life of the project for the presence of noxious weeds (includes maintenance and construction activities). If weeds are found the FFO Coordinator shall be notified at (505) 564-7600 and provided with a Weed Management Plan and if necessary, a Pesticide Use Proposal (PUP) . The FFO Coordinator can provide assistance developing the Weed Management Plan and/or the Pesticide Use Proposal.
f. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. (Company

Name)'s weed-control contractor would contact the BLM-FFO prior to using these chemicals.

g. Noxious/invasive weed treatments must be reported to the FFO Noxious Weed Coordinator. A Pesticide Application Record (PAR) is required to report any mechanical, chemical, biological or cultural treatments used to eradicate, and/or control noxious or invasive species. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

Bare ground vegetation trim-out: If bare ground vegetation treatment (trim-out) is desired around facility structures, the operator will submit a bare ground/trim-out design included in their Surface Use Plan of Operations (SUPO). The design will address vegetation safety concerns of the operator and BLM while minimizing impacts to interim reclamation efforts. The design must include what structures to be treated and buffer distances of trim-out. Pesticide use for vegetation control around anchor structures is not approved. If pesticides are used for bare ground trim-out, the trim-out will not exceed three feet from the edge of any eligible permanent structure (i.e., well heads, fences, tanks). Additional distance/areas may be requested and must be approved by the FFO authorized officer. The additional information below must also be provided to the FFO:

a. Pesticide use for trim out will require a Pesticide Use Proposal (PUP). A PUP is required ***prior*** to any treatment and must be approved by the FFO Noxious Weed Coordinator. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. Enduring Resources' weed-control contractor would contact the BLM-FFO prior to using these chemicals and provide Pesticide Use Reports (PURs) post treatment.

b. A Pesticide Use Report (PUR) or a Biological Use Report (BUR) is required to report any chemical, or biological treatments used to eradicate, or control vegetation on site. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

Paleontology: Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the AO to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the AO after consulting with the Holder.

Visual Resources

Lighting: All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source). All permanent lighting will be pointed straight down at the ground in order to prevent light spill to the sides. All permanent lighting will be 4000° Kelvin or less with

3000° Kelvin preferred. Warmer light colors are less noticeable by humans and cause less impact to wildlife. All permanent lighting will be controlled by a switch and/or timer which allows the lights to be turned on when workers are on location during dark periods but will keep the lights off the majority of the time.

Wildlife Resources

Nesting: If a bird nest containing eggs or young is encountered in the path of construction the operator will cease construction and consult with BLM to determine appropriate actions.

Hazards: Wildlife hazards associated with the proposed project would be fenced, covered, and/or contained in storage tanks, as necessary.

Threatened, Endangered or Sensitive Species: If, in operations the operator/holder discovers any Threatened, Endangered, or Sensitive species, work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM-FFO T&E specialist at (505) 564-7600. The BLM-FFO will then specify what action is to be taken. Failure to notify the BLM-FFO about a discovery may result in civil or criminal penalties in accordance with The Endangered Species Act (as amended).

Soil, Air, Water

Waste Disposal: Waste materials produced during all phases of operation will be disposed of promptly in an approved manner so it will not impact the air, soil, water, vegetation or animals. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment. All liquid waste, completion fluids and drilling products associated with oil and gas operations will be removed and deposited in an approved disposal site. Portable toilets will remain on site throughout well pad construction, drilling and reclamation. All fluids (i.e. scrubber cleaners) used during washing of production equipment, including compressors, will be properly disposed of to avoid ground contamination or hazard to livestock or wildlife. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment.

Cultural Resources

Non-Permitted Disturbance: Construction, construction maintenance or any other activity outside the areas permitted by the Sundry Notice will require additional approval and may require a new cultural survey and clearance.
Employee Education: All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources

Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

Discovery of Cultural Resources during Monitoring: If monitoring confirms the presence of previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery in accordance with 36 CFR Section 800.13, in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property, or in accordance with an approved program alternative. Minor recordation, stabilization, or data recovery may be performed by BLM or a third party acting on its behalf, such as a permitted cultural resources consultant. If warranted, more extensive archaeological or alternative mitigation, likely implemented by a permitted cultural resources consultant, may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any mitigations determined appropriate through the agency's Section 106 consultation are completed.

Discovery of Cultural Resources in the Absence of Monitoring: If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery the operator will suspend work, and the discovery will be promptly reported to BLM Field Manager. The same procedures to remedy the discovery in above section will be adhered to. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act (ARPA) of 1979, as amended, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, as amended, and other applicable laws.

Damage to Sites: If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare a BLM approved damage assessment and/or data recovery plan. The operator/holder agrees at his/her expense to implement a mitigation that the agency finds appropriate given the significance of the site, which the agency determines in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property. This mitigation may entail execution of the data recovery plan by a permitted cultural resource consultant and/or alternative mitigation. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act (ARPA) of 1979, as amended, the Native American Graves Protection and Repatriation Act (NAGRPA) of 1990, as amended, and other applicable laws.

See below for additional cultural stipulations.

BLM Report Number: 2023(III)010F
USGS Map: Navajo Dam, and Burnt Mesa, NM
Activity Code: 1310
NMCRIS No: 152787

CULTURAL RESOURCE RECORD OF REVIEW
BUREAU OF LAND MANAGEMENT
FARMINGTON FIELD OFFICE

1. Description of Report/Project:
Project Name: NEBU Unit 602/605 and Associated Water Conveyance Infrastructure.
Project Sponsor: IKAV Energy.
Arch. Firm & Report No.: SWCA Environmental Consultants; SWCA Report No. 23-247.
Location: T31N R7W Sections 11, 12, 14, 23, 25, & 26.

Well Footages: See plats.
Split Estate: Yes.
Project Dimensions: 750 ft x 515 ft – Irregularly Shaped Well Pad
740 ft x 400 ft – Irregularly Shaped Well Pad
50 ft x 50 ft - Pump Station 2
30 ft x 30 ft - Pump Station 3.
100 ft x 100 ft - TUA
22,563 ft x 40 ft – Waterline
50 ft x 50 ft - Pump Station 1.
3,452 ft x 40 ft - Pipeline
210 ft x 40 ft - Pipeline
557 ft x 30 ft - Access Road
1,277 ft x 40 ft - Pipeline
253 ft x 30 ft - Access Road
198 ft x 30 ft - Access Road

Sites Located: LA4790/NM-210-49490 (NRHP: Eligible; Update; Avoided).
LA4791/NM-210-494991 (NRHP: Eligible; Update; Avoided).
LA148751/NM-210-44316 (NRHP: Not Determined; Update; Avoided).
LA185525/NM-210-48864 (NRHP: Eligible; Update; Avoided).
LA186032/NM-210-48881 (NRHP: Not Eligible; Update; No Further Work).
LA187625/NM-210-48946 (NRHP: Eligible; Update; Avoided).
LA187836/NM-210-48969 (NRHP: Eligible; Update; Avoided).
LA187841/NM-210-48974 (NRHP: Not Determined; Update; Avoided).
LA189395/NM-210-49007 (NRHP: Not Determined; Update; Avoided).

Note: LA78806/NM-210-36577, LA117696/NM-210-40577, LA134499/NM-210-42402, & LA78809/NM-210-36580 were Not Relocated.
The majority of this project was previously inventoried.

Determination: No Adverse Effect to Historic Properties.
2. **Field Check:** No.
3. **Cultural ACEC:** No.
4. **Sensitive Cultural Area:** No.

Approval Date: 05/21/2025

5. Recommendation: *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED*: _X_
6. Reviewer /Archaeologist: Kim Adams **Date**: 5/15/2023

Report Summary	BLM	Other	Total
Acres Inventoried	4.4	2.3	6.7
Sites Recorded	0	0	0
Prev. Recorded Sites	7	2	9
Sites Avoided	6	2	8
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2023(III)010F

Project Name: NEBU Unit 602/605 and Associated Water Conveyance Infrastructure.
Project Sponsor: IKAV Energy.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:
All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:
A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that a site protection barrier is located as indicated on the attached maps in the vicinity of LA4790, LA4791, LA148751, LA185525, LA187836, LA187841, & LA189395.
- Observe the placement of the layflat line or any new ground disturbance within 100'of LA4790, LA4791, LA148751, LA185525, LA187625, LA187836, LA187841, & LA189395.

- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.

3. SITE PROTECTION BARRIER:
- The temporary site protection barriers will be erected prior to the placement of the layflat line or any new ground disturbance. The barriers will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barriers will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barriers will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barriers.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

Approval Date: 05/21/2025

SECTION 5: CIRCULATING MEDIUM (MUD PROGRAM)

CLOSED-LOOP SYSTEM DESIGN PLAN

The closed-loop system will consist of a series of temporary, above-ground storage tanks and/or haul-off bins suitable for holding the cuttings and fluid from drilling operations. The closed-loop system will not utilize temporary earthen pits, below-grade storage tanks, below-grade sumps, or drying pads.

Design considerations include:

- The closed-loop system will be signed in accordance with 19.15.17.11 NMAC.
- The storage tanks of the closed-loop system will be of adequate volume to ensure confinement of all fluids and provide sufficient freeboard to prevent uncontrolled releases.
- Topsoil will be salvaged and stored for use in reclamation activities.

CLOSED-LOOP SYSTEM OPERATING & MAINTENANCE PLAN

The closed-loop system will be operated and maintained to contain liquids and solids, minimize the amount of drilling fluids and cuttings requiring disposal, maximize the amount of drilling fluid recycled and reused in the drilling process, isolate drilling wastes from the environment, prevent contamination of fresh water, and protect public health and the environment.

Operation and maintenance considerations include:

- Fluid levels will be maintained to provide sufficient freeboard to prevent over-topping.
- Visual inspections will be conducted daily to identify any potential leaks and to ensure that the closed-loop system storage tanks have sufficient freeboard to prevent over-topping.
- Only drilling fluids or cuttings intrinsic to, used by, or generated from, drilling operations will be stored in the closed-loop system storage tanks. Hazardous waste, miscellaneous solid waste, and/or debris will not be stored in the storage tanks.
- The OCD District Office will be notified within 48 hours of discovery of a leak in the closed-loop drilling system. If a leak is discovered, all liquid will be removed within 48 hours and the damage repaired.

CLOSED-LOOP SYSTEM CLOSURE PLAN

The closed-loop system will be closed in accordance with 19.15.17.13 NMAC.

Closure considerations include:

- Drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical.
- Residual fluids will be pulled from the storage tanks, mixed with saw dust or similar absorbent material, and disposed of at Industrial Envirotech, Inc. waste disposal facilities.
- Remaining cuttings or sludges will be vacuumed from the storage tanks and disposed of at an EPA-approved waste disposal facility.
- Storage tanks will be removed from the well location during the rig move.
- The well pad will be reclaimed and seeded in accordance with subsections G, Hand I of 19.15.17.13 NMAC.

SECTION 1: GEOLOGIC FORMATIONS AND CONTENTS

MARKER	TVD	MD	COMMENTS	BHP (PSI/FT)
Animas	15	15	Wet/aquifer	0.43
Ojo Alamo SS	2,331	2,358	Wet/aquifer	0.43
Kirtland (Top/Cretaceous)	2,446	2,475	Gas & water-bearing	0.43
Fruitland Coal	2,947	2,985	Gas & water-bearing	0.07
Pictured Cliffs SS	3,301	3,346	Wet	0.12
Lewis Shale	3,525	3,574	Gas & water-bearing	0.35
Cliffhouse SS	5,381	5,463	Gas & water-bearing	0.35
Menefee	5,419	5,502	Gas & water-bearing	0.30
Point Lookout SS	5,660	5,747	Gas & water-bearing	0.30
Mancos Shale	6,136	6,232	Gas-bearing	0.43
LP (Mancos Lateral)	7,235	7,709	Gas-bearing	0.43
TD (Mancos Lateral)	7,224	20,863	Gas-bearing	0.43

Possible Aquifers: San Jose and Ojo Alamo

Oil Shale: None Expected

Oil & Gas: Primary objective is the Manco formation from 7,235’ TVD (landing point) to 7,224’ TVD (toe)

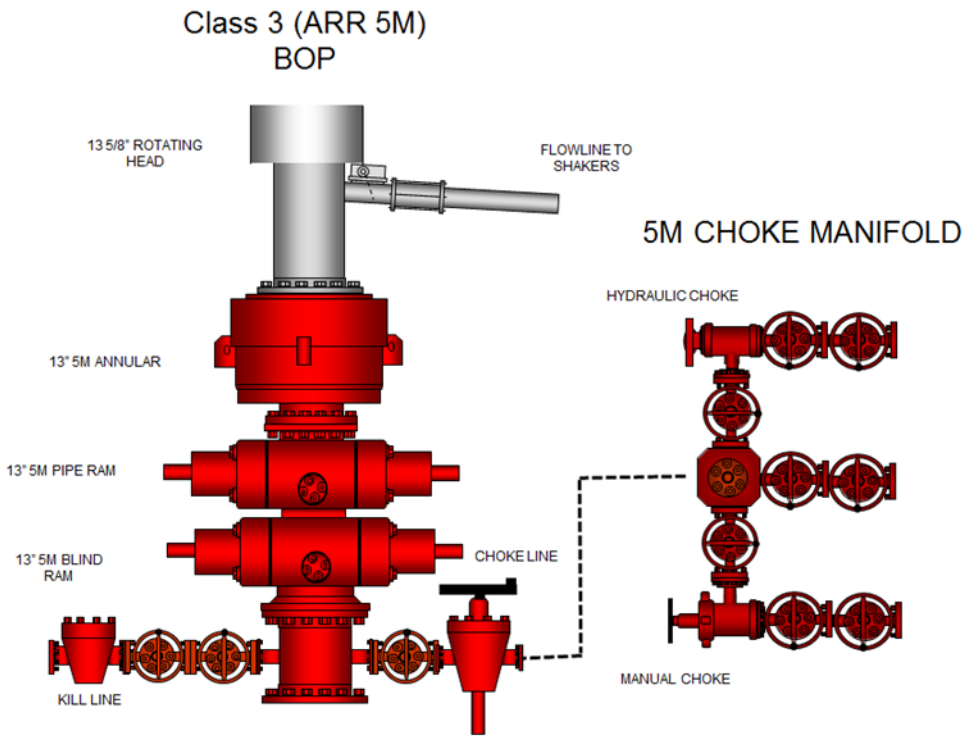
Protection of oil, gas, water, or other mineral-bearing formations: Protection shall be accomplished by setting surface casing below base of possible aquifer(s) and cementing casing to surface

SECTION 2: BOPE

BOP equipment and accessories will meet or exceed BLM requirements outlined in 43 CFR Part 3160.

A 13-5/8" 5M BOPE will be utilized to drill this well. Maximum anticipated surface pressure for 13-5/8" 5M BOPE is 1,500 psi. The 13-5/8" BOPE will be tested 250 psi (Low) for 5 minutes and 5000 psi (High) for 10 minutes if isolated by test plug or 70 percent of internal yield pressure of casing if BOP stack is not isolated from casing. Pressure test conductor, surface, and intermediate casing(s) to 1500 psi for 30 minutes. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 30 days, after any repairs are made to the BOP equipment, and after the BOP equipment is subjected to pressure. Annular preventers will be functionally operated at least once per week. Pipe rams will be activated daily and blind rams shall be activated each trip or at least weekly. The New Mexico Oil & Gas Conservation Commission and the BLM will be notified 24 hours in advance of testing of BOPE.

		BHP	MASP
13-5/8" 5M BOPE	7,235	3,133	1,500



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 466628
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
cale redpath	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/22/2025
cale redpath	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/22/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	7/10/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	7/10/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	7/10/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	7/10/2025
ward.rikala	This well can not be produced until operator is in compliance with Rule 5.9.	7/10/2025