Application for Permit to Drill

AFMSS

U.S. Department of the Interior

Bureau of Land Management

Well Number:

APD Package Report	Date Printed:
APD ID:	Well Status:
APD Received Date:	Well Name:

Operator:

APD Package Report Contents

- Form 3160-3

- Operator Certification Report
- Application Report
- Application Attachments
 - -- Operator Letter of Designation: 1 file(s)
 - -- Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - -- Blowout Prevention Choke Diagram Attachment: 1 file(s)
 - -- Blowout Prevention BOP Diagram Attachment: 1 file(s)
 - -- Casing Taperd String Specs: 4 file(s)
 - -- Casing Design Assumptions and Worksheet(s): 1 file(s)
 - -- Proposed horizontal/directional/multi-lateral plan submission: 1 file(s)
- SUPO Report
- SUPO Attachments
 - -- Existing Road Map: 1 file(s)
 - -- Attach Well map: 1 file(s)
 - -- Production Facilities map: 1 file(s)
 - -- Water source and transportation map: 1 file(s)
 - -- Well Site Layout Diagram: 2 file(s)
 - -- Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments
 - -- None
- Bond Report
- Bond Attachments
 - -- None

Form 3160-3 (June 2015)	UNITED STATES	FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018
DEPARTN	5. Lease Serial No.	
BUREAU (APPLICATION FOF	6. If Indian, Allotee or Tribe Name	
1a. Type of work: DRILL	7. If Unit or CA Agreement, Name and No.	
1b. Type of Well: Oil Well		
1c. Type of Completion: Hydraulic Fr	racturing Single Zone Multiple Zone	8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-043-21517
3a. Address	3b. Phone No. <i>(include area code)</i>	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly	ly and in accordance with any State requirements.*)	11. Sec., T. R. M. or Blk. and Survey or Area
At surface		
At proposed prod. zone		
14. Distance in miles and direction from near	arest 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	7. 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, R	T, GL, etc.) 22. Approximate date work will star	rt* 23. Estimated duration
	24. Attachments	
The following, completed in accordance with (as applicable)	th the requirements of Onshore Oil and Gas Order No. 1, as	nd the Hydraulic Fracturing rule per 43 CFR 3162.3-3
 Well plat certified by a registered surveyor A Drilling Plan. 	Item 20 above).	perations unless covered by an existing bond on file (see
3. A Surface Use Plan (if the location is on I SUPO must be filed with the appropriate		on. ific information and/or plans as may be requested by the
25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	
Application approval does not warrant or ce applicant to conduct operations thereon. Conditions of approval, if any, are attached.	ertify that the applicant holds legal or equitable title to those	e rights in the subject lease which would entitle the
	J.S.C. Section 1212, make it a crime for any person knowin fraudulent statements or representations as to any matter with	
	1.00	



*(Instructions on page 2)

.

(Continued on page 2)

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.

Additional Operator Remarks

Location of Well

0. SHL: SWNW / 1775 FNL / 1077 FWL / TWSP: 23N / RANGE: 01W / SECTION: 32 / LAT: 36.182679 / LONG: -106.971199 (TVD: 0 feet, MD: 0 feet) PPP: SENW / 2239 FSL / 1622 FWL / TWSP: 23N / RANGE: 01W / SECTION: 32 / LAT: 36.181402 / LONG: -106.969353 (TVD: 6530 feet, MD: 6859 feet) PPP: NESW / 2639 FSL / 2090 FWL / TWSP: 23N / RANGE: 01W / SECTION: 32 / LAT: 36.180304 / LONG: -106.967766 (TVD: 6530 feet, MD: 11323 feet) BHL: SESE / 74 FSL / 195 FEL / TWSP: 23N / RANGE: 01W / SECTION: 32 / LAT: 36.173265 / LONG: -106.957589 (TVD: 6530 feet, MD: 11423 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.

Conditions of Approval

Operator:	San Juan Resources, Inc. (SJR)
Well Names:	Regina Ranch Mancos Dakota Unit 32 #10H (+7 futures)
Legal Location:	Sec 32, T23N, R01W, Rio Arriba County, NM
NEPA Log Number:	DOI-BLM-NM-F010-2023-0012-EA
Inspection Date:	October 22, 2021
Lease Number:	NMNM018455

The following conditions of approval will apply to Regina Ranch Mancos Dakota Unit 32 #10H Project, 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, BOR, Tribes, 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.

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-F010-2023-0012-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: EplanningUi (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 <u>https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/the-gold-book.</u> Farmington Field Office BMPs 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 Surface, and Environmental Protection Staff at (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. SJR or their contractor will contact the Bureau of Land Management, Farmington Field Office Surface, and Environmental Protection Staff at (505) 564-7600 or by email to schedule a facility layout onsite.

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.

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.**

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 application. 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.

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 or recycled water and or other production waste shall be screened, netted, or otherwise covered to protect migratory birds and other wildlife from access.

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.

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.

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.

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

3

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. 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.
- d. 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.
- e. 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. SJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals.
- f. Noxious/invasive weed treatments must be reported to the FFO Noxious Weed Coordinator. A Pesticide Use Report (PUR) 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

4

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. SJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals and provide Pesticide Use Reports (PURs) post treatment.
- 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 Authorized Officer 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 Authorized Officer after consulting with the Holder.

Visual Resources

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

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

Migratory Bird: Any new disturbance over 4.0 acres within nesting season (5/15-7/31) will require a migratory bird nest survey to be conducted by BLM/FFO biologist. Once drilling and completion activities are complete, any open water that could be harmful to birds and wildlife. must be covered, screened, or netted to prevent entry.

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).

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.

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 Authorized Officer (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.

Soil, Air, Water

Land Farming: No excavation, remediation or closure activities will be authorized without prior approval, on any federal or Indian mineral estate, federal surface, or federal ROW. A Sundry Notice (DOI, BLM Form 3160-5) must be submitted with an explanation of the remediation or closure plan for on-lease actions.

Emission Control Standard: Compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less to comply with the New Mexico Environmental Department, Air Quality Bureau's guidance.

Waste Disposal: 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.

Cultural Resources

Non-Permitted Disturbance: Construction, construction maintenance or any other activity outside the areas permitted by the APD 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 in the Absence of Monitoring: 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 will be suspended and the discovery promptly reported to 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. 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 (NAGRPA) of 1990, as amended, and other applicable laws.

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

7

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.

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 resources consultant and/or alternative mitigations.** 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 additional cultural stipulations.



BLM Report Number: 2022(IV)003F USGS Map: Regina, NM Activity Code: 1310 NMCRIS No: 150522

CULTURAL RESOURCE RECORD OF REVIEW

BUREAU OF LAND MANAGEMENT FARMINGTON FIELD OFFICE

1. Description of Report/Project:

<u>Project Name:</u> Regina Ranch Deep Unit 32 No 10H Well Pad Expansion Project. <u>Project Sponsor:</u> San Juan Resources, Inc. <u>Arch. Firm & Report No.:</u> Division of Conservation Archaeology; DCA Report No. 22-DCA-025. <u>Location:</u> T23N R1W Section 32. <u>Well Footages:</u> N/A <u>Split Estate:</u> (Private Surface/Federal Minerals)

<u>Project Dimensions</u>: 400 ft x 400 ft – expansion of existing well pad (480 ft x 440 ft with a 40 ft construction zone on three sides of the pad).

Sites Located: None.

Determination: No Effect to Historic Properties.

- 2. Field Check: No.
- 3. Cultural ACEC: No.
- 4. Sensitive Cultural Area: No.
- **5. Recommendation:** *PROCEED WITH ACTION:* <u>X</u> *STIPULATIONS ATTACHED:* ____
- 6. Reviewer / Archaeologist: Kim Adams Date: 7/19/2022

Report Summary	BLM	Other	Total
Acres Inventoried	7.19	0.00	7.19
Sites Recorded	0	0	0
Prev. Recorded Sites	0	0	0
Sites Avoided	0	0	0
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.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington District Office 6251 College Blvd, Suite A Farmington, New Mexico 87402



In Reply Refer To: 3162.3-1(NMF0110)

* SAN JUAN RESOURCES INCORPORATED #010H REGINA RANCH MANCOS DAKOTA UNIT 32 Lease: NMNM018455 Agreement: NMNM143795X SH: SW¼NW¼ Section 32, T. 23 N., R. 1 W. Sandoval County, New Mexico BH: SE¼SE¼ Section 32, T. 23 N., R. 1 W. Sandoval County, New Mexico *Above Data Required on Well Sign

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when checked:

- A. 🖂 Note all surface/drilling conditions of approval attached.
- B. The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated
- C. Test the surface casing to a minimum of _____ psi for 30 minutes.
- D. Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.
- E. Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508. The effective date of the agreement must be **prior** to any sales.
- F. The use of co-flex hose is authorized contingent upon the following:

1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.

2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.

3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. <u>GENERAL</u>

- A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.
- B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.
- D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report (Form 3160-4) is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.
- E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).
- F. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to at Virgil Lucero at 505-793-1836.
- G. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.
- H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.
- I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all time, unless the well is secured with blowout preventers or cement plugs.
- J. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

II. <u>REPORTING REQUIREMENTS</u>

A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.

- B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed.
 - 1. Submit a Subsequent Report Sundry Notification, Action Type Drilling Action within AFMSS, giving complete information concerning.
 - a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
 - b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
 - c. Subsequent Report of Abandonment, show the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.
 - 2. Submit a Well Completion Report within AFMSS 30 days after well has been completed.
 - a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.
 - 3. Submit a cement evaluation log, if cement is not circulated to surface.

III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results. 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * Days or 50 MMCF following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

*30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the first gas to surface.

V. <u>SAFETY</u>

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Rig safety lines are to be installed.
- C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. <u>CHANGE OF PLANS OR ABANDONMENT</u>

- A. Any changes of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.
- B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.F. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.
- C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

VII. PHONE NUMBERS

A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.

Received by OCD: 6/24/2024 9:31:39 AM



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: ARLEEN SMITH		Signed on: 09/09/2022
Title: Regulatory Specialist		
Street Address: 332 RD 3100		
City: AZTEC	State: NM	Zip: 87410
Phone: (505)327-4892		
Email address: ARLEEN@WALSH	ENG.NET	
Field		
Representative Name:		
Street Address:		
City: St	tate:	Zip:
Phone:		
Email address:		

Received by OCD: 6/24/2024 9:31:39 AM

AFMSS

APD ID: 10400086735

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Submission Date: 09/15/2022

Operator Name: SAN JUAN RESOURCES INCORPORATED Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H Well Work Type: Drill Well Type: OIL WELL

Section 1 - General

APD ID: 10400086735	Tie to previous NOS? Y	Submission Date: 09/15/2022
AFDID: 10400000733		Submission Date. 09/13/2022
BLM Office: Farmington	User: ARLEEN SMITH	Title: Regulatory Specialist
Federal/Indian APD: FED	Is the first lease penetrate	ed for production Federal or Indian? FED
Lease number: NMNM018455	Lease Acres:	
Surface access agreement in place?	Allotted?	Reservation:
Agreement in place? YES	Federal or Indian agreeme	ent: FEDERAL
Agreement number: NMNM143795X		
Agreement name: REGINA RANCH (MANCOS/DAKOTA)	
Keep application confidential? Y		
Permitting Agent? YES	APD Operator: SAN JUAN	RESOURCES INCORPORATED
Operator letter of	NMNM143795X_REGINA_RANCH_I	DESIGNATION_LETTER_20220920144852.pdf

Operator Info

Operator Organization Name: SAN JUAN RESOURCES INCORPORATED Operator Address: 1499 BLAKE STREET, SUITE 10C Zip: 80202 **Operator PO Box: Operator City: DENVER** State: CO Operator Phone: (303)573-6333 **Operator Internet Address:**

Section 2 - Well Information

Well in Master Development Plan? NO	Master Development Plan name	e:
Well in Master SUPO? NO	Master SUPO name:	
Well in Master Drilling Plan? NO	Master Drilling Plan name:	
Well Name: REGINA RANCH MANCOS DAKOTA UNIT	Well Number: 010H	Well API Number:
32 Field/Pool or Exploratory? Field and Pool	Field Name: WILDCAT	Pool Name:

Highlighted data reflects the most

recent changes

Show Final Text

Application Data 06/24/2024 Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Is the proposed well in an area containing other mineral resources? $\ensuremath{\mathsf{OIL}}$

uction area? N	Use Existing Well Pad?	? N	New surface disturbance?
	•		Number: 001H
	Number of Legs: 1	0	
Distance to ne	arest well: 157 FT	Distanc	e to lease line: 100 FT
s Measurement:	359.64 Acres		
akota_Unit_32_	10H_Signed_Plat_20230	12711254	13.pdf
	Duration: 45 DAYS		
	Distance to ne s Measurement:	Multiple Well Pad Nam LINDRITH EAST DEEP Number of Legs: 1 Distance to nearest well: 157 FT & Measurement: 359.64 Acres Dakota_Unit_32_10H_Signed_Plat_20230	Distance to nearest well: 157 FT Distances S Measurement: 359.64 Acres Dakota_Unit_32_10H_Signed_Plat_2023012711254

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number: 15629

Vertical Datum: NAVD88

Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	177 5	FNL	107 7	FW L	23N	01 W	32	Aliquot SWN W	36.18267 9	106.9711	SAN DOV AL	MEXI			NMNM 018455	743 8	0	0	Y
KOP Leg #1	177 5	FNL	107 7	FW L	23N	01 W	32	Aliquot SWN W	36.18267 9	106.9711	SAN DOV AL	MEXI			NMNM 018455	146 1	598 0	597 7	Y
PPP Leg #1-1	223 9	FSL	162 2	FW L	23N	01 W	32	Aliquot SENW	36.18140 2	106.9693	SAN DOV AL	MEXI			NMNM 018455	908		653 0	Y

Released to Imaging: 8/19/2024 9:38:53 AM

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP	263	FSL	209	FW	23N	01	32	Aliquot	36.18030	-	SAN	NEW	FIRS	F	NMNM	908	113	653	Y
Leg	9		0	L		W		NESW	4	106.9677	DOV	MEXI	T		010199		23	0	
#1-2										66	AL	со	PRIN		0				
EXIT	74	FSL	195	FEL	23N	01	32	Aliquot	36.17326	-	SAN	NEW	FIRS	F	NMNM	908	114	653	Y
Leg						W		SESE	5	106.9575	DOV	MEXI	T		010199		23	0	
#1										89	AL	co	PRIN		0				
BHL	74	FSL	195	FEL	23N	01	32	Aliquot	36.17326	-	SAN	NEW	FIRS	F	NMNM	908	114	653	Y
Leg						W		SESE	5	106.9575	DOV	MEXI	T		010199		23	0	
#1										89	AL	co	PRIN		0				

Received by OCD: 6/24/2024 9:31:39 AM



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Wyoming State Office Reservoir Management Group 2987 Prospector Drive Casper, WY 82604-2968



In Reply Refer To: 3181 (3181.1) Regina Ranch (Deep) Unit NMNM143795X

DEC 2 9 2021

San Juan Resources, Inc. Attn: Jerome McHugh, Jr. 1499 Blake Street, Suite 10C Denver, CO 80202

Gentlemen:

Your application of September 13, 2021, filed with the Chief, Reservoir Management Group requests the designation of 7,279.65 acres, more or less, in Sandoval County, New Mexico, as logically subject to exploration and development under unitization provisions of the Mineral Leasing Act, as amended.

Pursuant to unit plan regulations 43 CFR 3180, the land requested, as outlined on your plat marked "Exhibit 'A', Regina Ranch (Deep) Unit Area" is hereby designated as a logical unit area. The unit agreement submitted for the area designation should provide for the drilling of the following test well:

Name: Regina Ranch (Deep) Unit 32 #1H

Surface Location: SW1/4, Sec. 32, T.23N., R.1W., NM. P.M.

Formation and Depth: Horizontal lateral drilled to test the Mancos Formation with a lateral of at least 2,640 feet (the top of the Mancos Formation occurs at approximately 5,400 feet measured depth (MD) as indicated on the gamma ray and resistivity logs in the Westerly Exploration Federal 32-1 (API No. 30-043-20989) well, located in the SE¼SW¼ SW¼ of Sec. 32, T.23N., R.1W., NM P.M.) has tested said target.

The use of the Form of Agreement for Unproven Areas (43 CFR 3186.1, as revised April 1994), modified as shown in your application, will be accepted. If conditions are such that further modification of said standard form is deemed necessary, two copies of the proposed modifications with appropriate justification must be submitted for preliminary approval.

In the absence of any other type of land requiring special provisions or of any objections not now apparent, a duly executed agreement identical with said form, modified as outlined above, Released to Imaging: 8/19/2024 9:38:53 AM

Received by OCD: 6/24/2024 9:31:39 AM

will be approved if submitted in approvable status within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of operations in the unit area.

If a well is commenced and penetrates the geologic formation specified in Section 9 of the unit agreement prior to final unit approval, it cannot be considered as the unit obligation well. In such event the unit obligation well still must be drilled. If you elect to initiate drilling of the obligation well prior to final unit approval, please be advised that the agreement must be filed in time to permit it to be processed in the normal sequence of events without priority consideration because of a well drilling in the unit area.

To help prevent delay in the commencement of drilling the obligation well or subsequent wells, please review all Federal leases within the unit area as to restrictive stipulations which protect wildlife and other resources. Also, contact the Farmington Field Office for any additional Conditions of Approval that may be incorporated in the approval of the Application for Permit to Drill (APD) that may delay commencement of the unit wells.

To ensure the timely handling of units submitted for final approval, proponent must show 100 percent commitment of all lessees of record, basic royalty owners, and working interest owners, or evidence that every such owner of interest in the unit has been given an opportunity to join the unit agreement. If any owner fails or refuses to join, evidence of reasonable effort to obtain a joinder should be submitted, together with a copy of each refusal by an operator giving the reasons for nonjoinder. If a refusal letter cannot be obtained, unit proponent should provide, in writing, a record of the attempts made to obtain joinder.

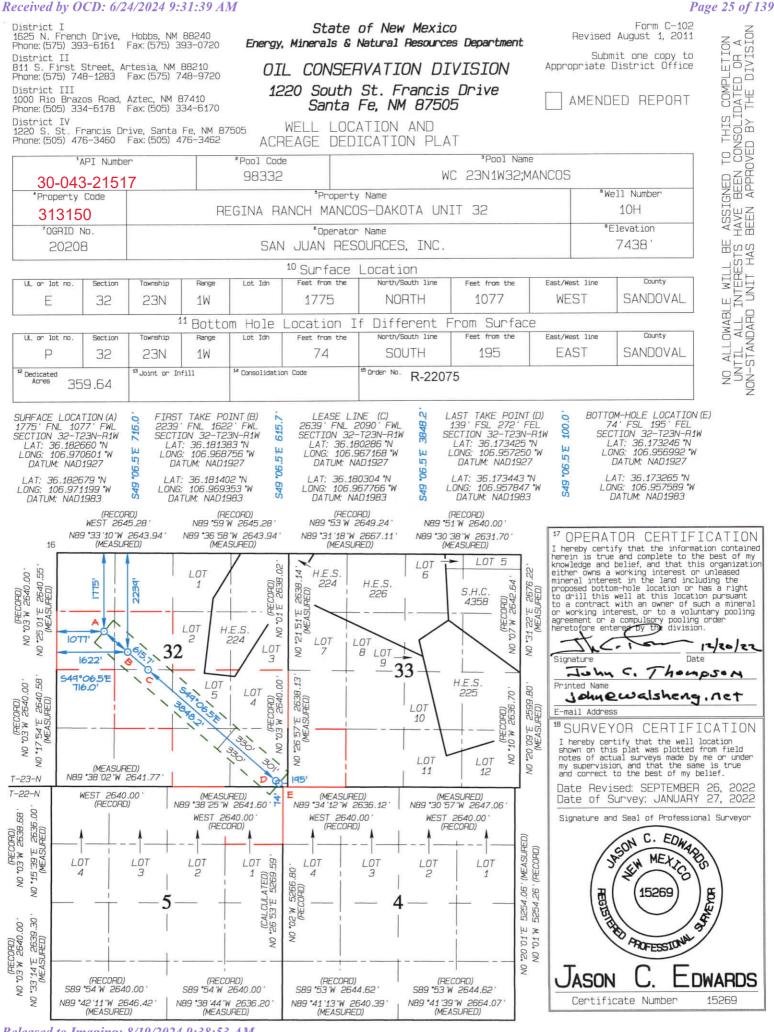
When the executed agreement is transmitted to the Chief, Reservoir Management Group for approval, include the latest status of all acreage. In preparation of Exhibits "A" and "B", follow closely the format of the sample exhibits attached to the aforementioned form.

For land questions, please contact Sandy Blackburn, Land Law Examiner, at (307) 261-7632, for all other questions please contact Karl Osvald, Geologist, at (307) 261-7729.

Sincerely,

J. David Chase Chief, Reservoir Management Group

 cc: NMSO, Sheila Mallory w/ application ONRR-RRM (email: leases.blm@onrr.gov) New Mexico State Land Office, Scott Dawson New Mexico Oil Conservation Division, Leonard Lowe UnitSource, Inc. (Tim Woodroof) 2580 Pierson Street Lakewood CO 80215



Released to Imaging: 8/19/2024 9:38:53 AM

.



Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13645014	SAN JOSE	0	0	0	SANDSTONE	NONE	N
13645015	NACIMIENTO	-1399	1399	1399	COAL	NONE	N
13645016	OJO ALAMAO	-2604	2604	2604	COAL	OTHER : Water Zone	N
13645017	KIRTLAND	-2758	2758	2758	COAL	OTHER : Water zone	N
13645019	FRUITLAND COAL	-2872	2872	2872	COAL	COAL	N
13645020	PICTURED CLIFFS	-2930	2930	2930	COAL	NATURAL GAS, OIL	Y
13645022	LEWIS	-3007	3007	3007	COAL	NATURAL GAS	N
13645012		0					

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 7283

Equipment: The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturers specification. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative. All BOP equipment will be hydraulically operated with controls accessible both on the rig floor. The wellhead BOP equipment will be nippled-up on the 9-5/8 x 11 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes.

Requesting Variance? NO

Variance request:

Testing Procedure: Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Commission and the BLM will be notified 24 hours in advance of testing of BOPE and 9 5/8 slip-on / welded x 11 3,000 psi casing head.

Choke Diagram Attachment:

Regina_Ranch_Mancos_Dakota_Unit_32_10H__3M_BOPE_20220909120352.pdf

BOP Diagram Attachment:

Regina_Ranch_Mancos_Dakota_Unit_32_10H__3M_BOPE_20220909120402.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCT OR	26	16.0	NEW	API	Y	0	60	0	7299	7438	139	60	OTH ER	0	OTHER - none						
2	SURFACE	12	9.5	NEW	API	Y	0	500	0	500	7438	6938	500	K-55	36	LT&C	1.25	1	DRY	1.6	DRY	1
3	INTERMED IATE	8	7.0	NEW	API	Y	0	6860	500	6860	6849	578	6860	J-55	26	LT&C	1.25	1	DRY	1.6	DRY	1.6
4	PRODUCTI ON	6	4.5	NEW	API	Y	7100	11424	6842	11424	507	-3986	4324	P- 110	11.6	LT&C	1.25	1	DRY	1.6	DRY	1.6

Casing Attachments

Casing ID: 1

CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

BLM_drilling_plan__Regina_Ranch_Mancos_Dakota_Unit_32_10H_20230127112802.pdf

Casing Design Assumptions and Worksheet(s):

String

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Casing Attachments

Casing ID: 2 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

BLM_drilling_plan__Regina_Ranch_Mancos_Dakota_Unit_32_10H_20230127112815.pdf

Casing Design Assumptions and Worksheet(s):

BLM_drilling_plan__Regina_Ranch_Mancos_Dakota_Unit_32_10H_20230127112824.pdf

Casing ID: 3	String	INTERMEDIATE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
BLM_drilling_plan_	_Regina_Rar	nch_Mancos_Dakota_Unit_32_10H_20230127112845.pdf
Casing Design Assump	tions and Wo	orksheet(s):
Casing ID: 4	String	PRODUCTION
Inspection Document:		
Spec Document:		
Tapered String Spec:		
BLM_drilling_plan_	_Regina_Rar	nch_Mancos_Dakota_Unit_32_10H_20230127112833.pdf
Casing Design Assump	tions and Wo	orksheet(s):

Section 4 - Cement

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead	50	0	50	100	1.15	15.8	115		Class G	2% Calcium Chloride

SURFACE	Lead		0	500	60	2.98	11.5	179	Varicem Cement	0.125# Poly E Flake 0.25# Kwick Seal
SURFACE	Tail		0	500	100	1.83	13.5	183	Varicem Cement	0.125# Poly E Flake 0.25# Kwick Seal
INTERMEDIATE	Lead	5060	0	5200	525	2.98	11.5	1563	VARICEM CEMENT	0.125# Poly E Flake 0.25# Kwick Seal
INTERMEDIATE	Tail		6859	5200	255	1.9	12	502	HALCEM	0.05% sa 1015 5 LBM Kol-Seal 0.125 Poly E Flake
PRODUCTION	Lead		6710	1124 2	250	2.6	11.5	658	Varicem Cement	0.125# Poly E Flake 0.25# Kwick Seal

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Describe the mud monitoring system utilized: d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be buried on site in compliance with NMOCD Rule 19. Any waste water not utilized in the drilling process will be disposed of properly at Envirotech Environmental Disposal facility.

Circulating Medium Table

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	50	LSND/GEL	8.3	9.8							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

- a) Drill Stem Testing None anticipated
- b) Coring None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging 8-3/4 section only
- List of open and cased hole logs run in the well:

MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

no coring anticipated

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2337

Anticipated Surface Pressure: 900

Anticipated Bottom Hole Temperature(F): 165

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? NO Hydrogen sulfide drilling operations

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Regina_Ranch_Deep_Unit_32_10H_Standard_Planning_Report_20220830135823.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

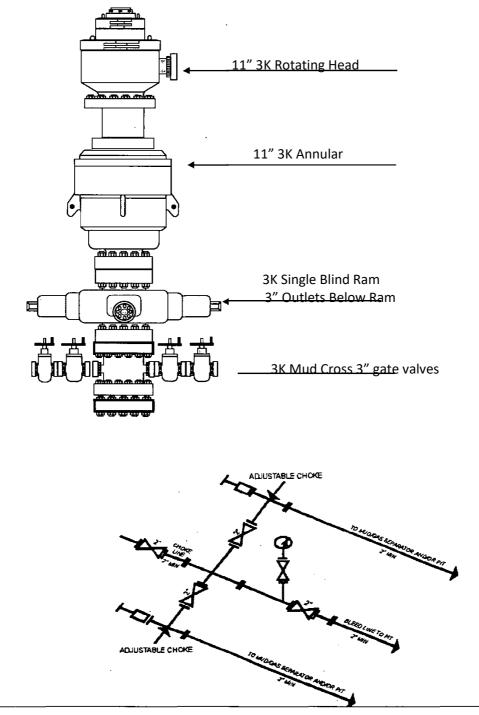
Other Variance attachment:

Attachment To Application For Permit To Drill.

3M BOPE

Exhibit A



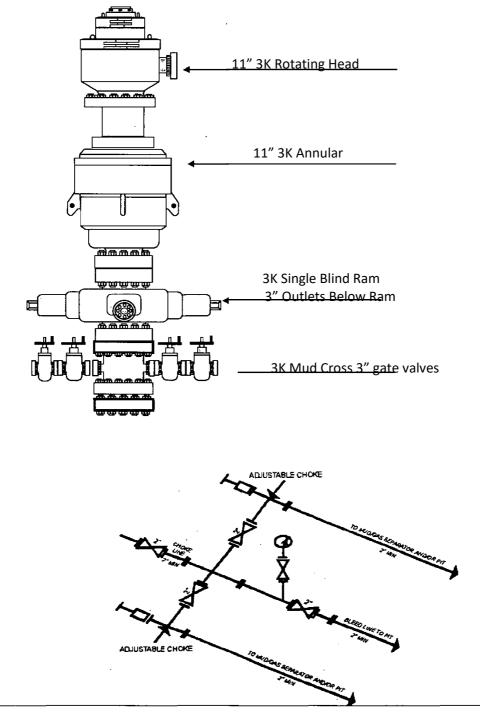


Attachment To Application For Permit To Drill.

3M BOPE

Exhibit A





Attachment To Application For Permit To Drill. Drilling program

San Juan Resources

1499 Blake Street, Suite 10C Denver, Colorado 80202 U.S.A

Regina Ranch Mancos/Dakota Unit 32-10H

Horizontal - Mancos Oil and Gas Well Surface Location: 1775' FNL – 1077' FWL Section 32, T23N, R1W Ungraded GL Elev = 7438' Lat. = 36.182660 deg N Long. = -106.970601 deg W Bottom Hole Location: 74 FSL – 195' FEL Section 32, T23N, R1W Lat. = 36.173246 deg N Long. = -106.957589 W NAD83 Rio Arriba County, New Mexico

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18,1988

Driving Directions to Location:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7; Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM; Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side; Go Left (South-westerly) on private road for 0.3 miles to fork in road; Go Right (North-westerly) for 0.4 miles to San Juan Resources, Inc. Regina Ranch Deep Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources, Inc. Atencio #1 existing location.

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

Formation Tops	Surface (TVD)	MD
San Jose	Surface	Surface
Nacimiento	1399	1399
Ojo Alamo	2604	2604
Kirtland	2758	2758
Fruitland Coal	2872	2872
Pictured Cliffs	2930	2930
Lewis	3007	3007
Cliff House	4690	4690
Menefee	4730	4730
Point Lookout	5158	5158
Mancos	5363	5363
КОР	5978	5980
Mancos/Niobrara A	6258	6276
Mancos/Niobrara B	6370	6420
Mancos/Niobrara C	6488	6639
Mancos/Niobrara C (TARGET) 7" CSG PT	6530	6859
LTP	6530	11324
PBHL/TD	6530	11424
Sanostee/Juan Lopez	6882	
Greenhorn	7330	
Dakota	7453	
Dakota Base	7780	
Morrison	7780	
Total Depth	6530'	11,424'

Drilling Plan

Drill 12 ¼" hole to 500' then set 9 5/8" casing. Drill 8-3/4" vertical hole with fresh water mud system to KOP at ~ 5980'. Build 90' angle to 6859' MD/ 6530' TVD then set 7" casing. Drill 6-1/8" lateral hole to a TD of 11,324' MD/TVD 6530' and set 4-1/2" liner. Plan to cement all casing strings to surface and liner back to 7" casing.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Niobrara C formation encountered first at 6488' TVD.

Substance	Formation	Top Surface (TVD)
Water/Gas	Fruitland Coal	2872
Oil/Gas	Pictured Cliffs	2930
Oil/Gas	Cliffhouse	4690
Gas	Menefee	4730
Gas	Point Lookout	5158
Oil/Gas	Mancos	5363
Oil/Gas	Niobrara A	6258
Oil/Gas	Niobrara B	6370
Oil/Gas	Niobrara C	6488

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

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

- A. Wellhead Equipment 3000 PSI System (See Exhibit A)
 - 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
 - 2. One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on top & one (1) set of pipe rams on bottom complete with hand wheels and extension arms.
 - 3. The choke and kill lines will be connected to outlets between the bottom and top rams, utilizing either the ram body outlet or a drilling spool with side outlets for 2" kill line and minimum 3" choke line
 - 4. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.
 - 5. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
 - 6. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
 - 7. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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 and 9 5/8" slip-on / welded x 11" 3,000 psi casing head.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

26" Conductor = surface to 60' 12-1/4" Surface Hole = Surface to 500' 8-3/4" Intermediate = 6860' MD 6-1/8" Production Liner = 11,424' MD

B. Casing Program - all casing stings are new casing

Casing & Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
16" Conductor (26")	65 ppf	H-40	ST&C	0' - 60-ft BGL	New casing.
9-5/8" (12 1/4")	36 ppf	K-55	LT&C	0' - 500'	New casing. Cement to surface.

7" (8-3/4")	26 ppf	J55	LT&C	0' - 6860'	New Casing. Cement to surface.
4-1/2" (6-1/8")	11.6 ppf	P110	LT&C	6710' – 11,424'	New Casing Cement back to Intermediate

Casing strings below the conductor casing will be tested to .22 psi per foot of

casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:	Collapse -	1.125
	Burst -	1.0
	Jt. Strength -	1.60

5. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed or equivalent slurries depending on service provider selected for cement operations. Actual cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

a) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Conductor Casing Single Stage Job (0-60')

100 sx of Type I Neat 16 ppg

<u>Surface Casing Single Stage Job – (0-500'):</u> Excess – 125% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132 cf/ft) Top of Cement - Surface

Lead – 60 sx (179 cf)– 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Tail - 100 sx (183 cf) – 13.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 1.831 cuft/sx

Compressive strength: 24 hr – 1000+ psi

Total sacks of cement pumped = 160 sx (360 cf)

Intermediate – Single Stage Job (0-6859'): Excess – 100% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft) Top of Cement – Surface.

1st Stage

Lead - (5200' – Surf'): 525 sx (1,569 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Tail - (6,859' – 5,200'): 255 sx (502 cf) – 12.0 ppg, conventional cement containing: Released to Imaging: 8/19/2014 to 38.53 0.05% sa-1015 5 LBM Kol-Seal 0.125 Poly-E-Flake Yield – 1.97 ft3/sx, Compressive strength: 24 hr – 1500+ psi

<u>Total sacks of cement pumped = 780 sx (2071 cf)</u> Cement volumes are minimums and may be adjusted based on caliper log results & hole conditions.

<u>Production Liner – Single Stage Job (6,710' - 11,242'):</u> Excess – 50% over gauge hole – 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft) Top of Cement – Liner Hanger

250 sx (658 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.63 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Total sacks of cement pumped = 250 sx (658 cf)

6. PROPOSED DRILLING FLUIDS PROGRAM

a) Surface through intermediate casing point

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-500'	FreshWater	8.3-9.4	28-42	NC
8-3/4"	500'-6530'/6859'	Fresh Water LSND	8.3-9.5	40 - 50	6-8.5

b) Intermediate casing point to TD.

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6-1/8"	6,530'/6,859' – 6,530'/11,704'	Fresh Water LSND	8.3-9.5	15-25	6 - 8

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be dried and stored onsite until they are hauled to an NMOCD approved facility for disposal. Any waste water not utilized in the drilling process will be disposed of properly at TnT Environmental Disposal facility or any other approved disposal facility.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing None anticipated
- b) Coring-None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging Program: 8-3/4" section only. CBL/GR for Depth Control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The maximum anticipated bottom hole pressure is +/-2337 psi based on a 9.0 ppg at 6530' (Total Depth - TVD). No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. COMPLETION AND PRODUCTION PLANS

Frac: Lateral will be hydraulically fractured in approximately 25 plug and perf stages with approximately 50,000 bbls of gelled water in 70 Quality Nitrogen Foam and 8,400,000 lbs of proppant (actual design will be modified once the lateral has been drilled, cased and cemented).

Flowback: Well will be flowed back through tubing and captured at the surface via sand separators, flowback manifolds, flowback tanks and related surface equipment, designed to minimize emissions and waste.

Production: Well will be produced up production tubing via gas lift into the permanent production and storage facilities.

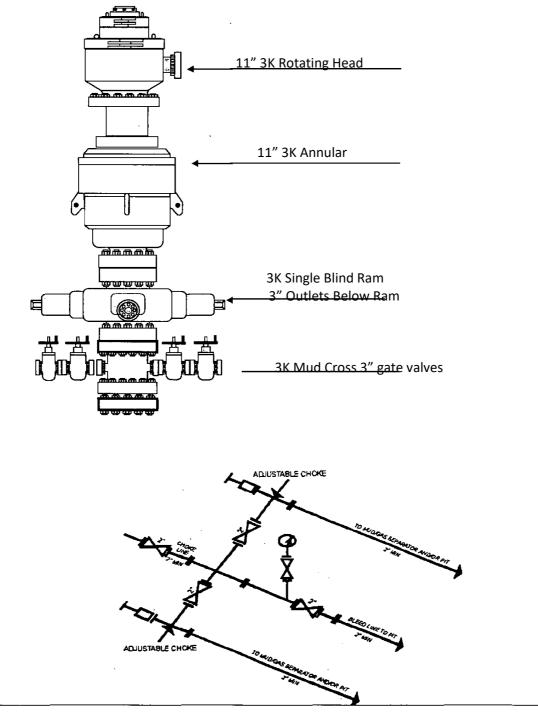
10. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on April 15, 2023. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 15 days.

Exhibit A

WELLHEAD BLOWOUT CONTROL SYSTEM



Attachment To Application For Permit To Drill. Drilling program

San Juan Resources

1499 Blake Street, Suite 10C Denver, Colorado 80202 U.S.A

Regina Ranch Mancos/Dakota Unit 32-10H

Horizontal - Mancos Oil and Gas Well Surface Location: 1775' FNL – 1077' FWL Section 32, T23N, R1W Ungraded GL Elev = 7438' Lat. = 36.182660 deg N Long. = -106.970601 deg W Bottom Hole Location: 74 FSL – 195' FEL Section 32, T23N, R1W Lat. = 36.173246 deg N Long. = -106.957589 W NAD83 Rio Arriba County, New Mexico

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18,1988

Driving Directions to Location:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7; Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM; Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side; Go Left (South-westerly) on private road for 0.3 miles to fork in road; Go Right (North-westerly) for 0.4 miles to San Juan Resources, Inc. Regina Ranch Deep Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources, Inc. Atencio #1 existing location.

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

Formation Tops	Surface (TVD)	MD
San Jose	Surface	Surface
Nacimiento	1399	1399
Ojo Alamo	2604	2604
Kirtland	2758	2758
Fruitland Coal	2872	2872
Pictured Cliffs	2930	2930
Lewis	3007	3007
Cliff House	4690	4690
Menefee	4730	4730
Point Lookout	5158	5158
Mancos	5363	5363
КОР	5978	5980
Mancos/Niobrara A	6258	6276
Mancos/Niobrara B	6370	6420
Mancos/Niobrara C	6488	6639
Mancos/Niobrara C (TARGET) 7" CSG PT	6530	6859
LTP	6530	11324
PBHL/TD	6530	11424
Sanostee/Juan Lopez	6882	
Greenhorn	7330	
Dakota	7453	
Dakota Base	7780	
Morrison	7780	
Total Depth	6530'	11,424'

Drilling Plan

Drill 12 ¼" hole to 500' then set 9 5/8" casing. Drill 8-3/4" vertical hole with fresh water mud system to KOP at ~ 5980'. Build 90' angle to 6859' MD/ 6530' TVD then set 7" casing. Drill 6-1/8" lateral hole to a TD of 11,324' MD/TVD 6530' and set 4-1/2" liner. Plan to cement all casing strings to surface and liner back to 7" casing.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Niobrara C formation encountered first at 6488' TVD.

Substance	Formation	Top Surface (TVD)
Water/Gas	Fruitland Coal	2872
Oil/Gas	Pictured Cliffs	2930
Oil/Gas	Cliffhouse	4690
Gas	Menefee	4730
Gas	Point Lookout	5158
Oil/Gas	Mancos	5363
Oil/Gas	Niobrara A	6258
Oil/Gas	Niobrara B	6370
Oil/Gas	Niobrara C	6488

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

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

- A. Wellhead Equipment 3000 PSI System (See Exhibit A)
 - 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
 - 2. One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on top & one (1) set of pipe rams on bottom complete with hand wheels and extension arms.
 - 3. The choke and kill lines will be connected to outlets between the bottom and top rams, utilizing either the ram body outlet or a drilling spool with side outlets for 2" kill line and minimum 3" choke line
 - 4. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.
 - 5. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
 - 6. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
 - 7. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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 and 9 5/8" slip-on / welded x 11" 3,000 psi casing head.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

26" Conductor = surface to 60' 12-1/4" Surface Hole = Surface to 500' 8-3/4" Intermediate = 6860' MD 6-1/8" Production Liner = 11,424' MD

B. Casing Program - all casing stings are new casing

Casing	& Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
16" Co	nductor (26")	65 ppf	H-40	ST&C	0' - 60-ft BGL	New casing.
9-5/8" (12 1/4")	36 ppf	K-55	LT&C	0' - 500'	New casing. Cement to surface.

7" (8-3/4")	26 ppf	J55	LT&C	0' - 6860'	New Casing. Cement to surface.
4-1/2" (6-1/8")	11.6 ppf	P110	LT&C	6710' – 11,424'	New Casing Cement back to Intermediate

Casing strings below the conductor casing will be tested to .22 psi per foot of

casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:	Collapse -	1.125
	Burst -	1.0
	Jt. Strength -	1.60

5. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed or equivalent slurries depending on service provider selected for cement operations. Actual cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

a) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Conductor Casing Single Stage Job (0-60')

100 sx of Type I Neat 16 ppg

<u>Surface Casing Single Stage Job – (0-500'):</u> Excess – 125% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132 cf/ft) Top of Cement - Surface

Lead – 60 sx (179 cf)– 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Tail - 100 sx (183 cf) – 13.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 1.831 cuft/sx

Compressive strength: 24 hr – 1000+ psi

Total sacks of cement pumped = 160 sx (360 cf)

Intermediate – Single Stage Job (0-6859'): Excess – 100% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft) Top of Cement – Surface.

1st Stage

Lead - (5200' – Surf'): 525 sx (1,569 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Tail - (6,859' – 5,200'): 255 sx (502 cf) – 12.0 ppg, conventional cement containing: Released to Imaging: 8/19/2014 to 38.53 0.05% sa-1015 5 LBM Kol-Seal 0.125 Poly-E-Flake Yield – 1.97 ft3/sx, Compressive strength: 24 hr – 1500+ psi

<u>Total sacks of cement pumped = 780 sx (2071 cf)</u> Cement volumes are minimums and may be adjusted based on caliper log results & hole conditions.

<u>Production Liner – Single Stage Job (6,710' - 11,242'):</u> Excess – 50% over gauge hole – 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft) Top of Cement – Liner Hanger

250 sx (658 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.63 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Total sacks of cement pumped = 250 sx (658 cf)

6. PROPOSED DRILLING FLUIDS PROGRAM

a) Surface through intermediate casing point

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-500'	FreshWater	8.3-9.4	28-42	NC
8-3/4"	500'-6530'/6859'	Fresh Water LSND	8.3-9.5	40 - 50	6-8.5

b) Intermediate casing point to TD.

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6-1/8"	6,530'/6,859' – 6,530'/11,704'	Fresh Water LSND	8.3-9.5	15-25	6 - 8

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be dried and stored onsite until they are hauled to an NMOCD approved facility for disposal. Any waste water not utilized in the drilling process will be disposed of properly at TnT Environmental Disposal facility or any other approved disposal facility.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing None anticipated
- b) Coring-None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging Program: 8-3/4" section only. CBL/GR for Depth Control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The maximum anticipated bottom hole pressure is +/- 2337 psi based on a 9.0 ppg at 6530' (Total Depth - TVD). No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. COMPLETION AND PRODUCTION PLANS

Frac: Lateral will be hydraulically fractured in approximately 25 plug and perf stages with approximately 50,000 bbls of gelled water in 70 Quality Nitrogen Foam and 8,400,000 lbs of proppant (actual design will be modified once the lateral has been drilled, cased and cemented).

Flowback: Well will be flowed back through tubing and captured at the surface via sand separators, flowback manifolds, flowback tanks and related surface equipment, designed to minimize emissions and waste.

Production: Well will be produced up production tubing via gas lift into the permanent production and storage facilities.

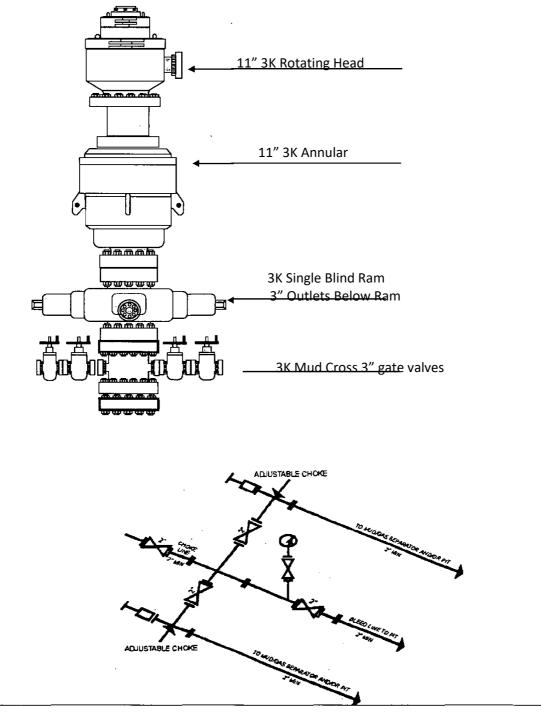
10. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on April 15, 2023. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 15 days.

Exhibit A

WELLHEAD BLOWOUT CONTROL SYSTEM



Attachment To Application For Permit To Drill. Drilling program

San Juan Resources

1499 Blake Street, Suite 10C Denver, Colorado 80202 U.S.A

Regina Ranch Mancos/Dakota Unit 32-10H

Horizontal - Mancos Oil and Gas Well Surface Location: 1775' FNL – 1077' FWL Section 32, T23N, R1W Ungraded GL Elev = 7438' Lat. = 36.182660 deg N Long. = -106.970601 deg W Bottom Hole Location: 74 FSL – 195' FEL Section 32, T23N, R1W Lat. = 36.173246 deg N Long. = -106.957589 W NAD83 Rio Arriba County, New Mexico

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18,1988

Driving Directions to Location:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7; Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM; Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side; Go Left (South-westerly) on private road for 0.3 miles to fork in road; Go Right (North-westerly) for 0.4 miles to San Juan Resources, Inc. Regina Ranch Deep Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources, Inc. Atencio #1 existing location.

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

Formation Tops	Surface (TVD)	MD
San Jose	Surface	Surface
Nacimiento	1399	1399
Ojo Alamo	2604	2604
Kirtland	2758	2758
Fruitland Coal	2872	2872
Pictured Cliffs	2930	2930
Lewis	3007	3007
Cliff House	4690	4690
Menefee	4730	4730
Point Lookout	5158	5158
Mancos	5363	5363
КОР	5978	5980
Mancos/Niobrara A	6258	6276
Mancos/Niobrara B	6370	6420
Mancos/Niobrara C	6488	6639
Mancos/Niobrara C (TARGET) 7" CSG PT	6530	6859
LTP	6530	11324
PBHL/TD	6530	11424
Sanostee/Juan Lopez	6882	
Greenhorn	7330	
Dakota	7453	
Dakota Base	7780	
Morrison	7780	
Total Depth	6530'	11,424'

Drilling Plan

Drill 12 ¼" hole to 500' then set 9 5/8" casing. Drill 8-3/4" vertical hole with fresh water mud system to KOP at ~ 5980'. Build 90' angle to 6859' MD/ 6530' TVD then set 7" casing. Drill 6-1/8" lateral hole to a TD of 11,324' MD/TVD 6530' and set 4-1/2" liner. Plan to cement all casing strings to surface and liner back to 7" casing.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Niobrara C formation encountered first at 6488' TVD.

Substance	Formation	Top Surface (TVD)
Water/Gas	Fruitland Coal	2872
Oil/Gas	Pictured Cliffs	2930
Oil/Gas	Cliffhouse	4690
Gas	Menefee	4730
Gas	Point Lookout	5158
Oil/Gas	Mancos	5363
Oil/Gas	Niobrara A	6258
Oil/Gas	Niobrara B	6370
Oil/Gas	Niobrara C	6488

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

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

- A. Wellhead Equipment 3000 PSI System (See Exhibit A)
 - 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
 - 2. One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on top & one (1) set of pipe rams on bottom complete with hand wheels and extension arms.
 - 3. The choke and kill lines will be connected to outlets between the bottom and top rams, utilizing either the ram body outlet or a drilling spool with side outlets for 2" kill line and minimum 3" choke line
 - 4. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.
 - 5. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
 - 6. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
 - 7. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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 and 9 5/8" slip-on / welded x 11" 3,000 psi casing head.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

26" Conductor = surface to 60' 12-1/4" Surface Hole = Surface to 500' 8-3/4" Intermediate = 6860' MD 6-1/8" Production Liner = 11,424' MD

B. Casing Program - all casing stings are new casing

Casing	& Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
16" Co	nductor (26")	65 ppf	H-40	ST&C	0' - 60-ft BGL	New casing.
9-5/8" (12 1/4")	36 ppf	K-55	LT&C	0' - 500'	New casing. Cement to surface.

7" (8-3/4")	26 ppf	J55	LT&C	0' - 6860'	New Casing. Cement to surface.
4-1/2" (6-1/8")	11.6 ppf	P110	LT&C	6710' – 11,424'	New Casing Cement back to Intermediate

Casing strings below the conductor casing will be tested to .22 psi per foot of

casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:	Collapse -	1.125
	Burst -	1.0
	Jt. Strength -	1.60

5. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed or equivalent slurries depending on service provider selected for cement operations. Actual cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

a) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Conductor Casing Single Stage Job (0-60')

100 sx of Type I Neat 16 ppg

<u>Surface Casing Single Stage Job – (0-500'):</u> Excess – 125% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132 cf/ft) Top of Cement - Surface

Lead – 60 sx (179 cf)– 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Tail - 100 sx (183 cf) – 13.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 1.831 cuft/sx

Compressive strength: 24 hr – 1000+ psi

Total sacks of cement pumped = 160 sx (360 cf)

Intermediate – Single Stage Job (0-6859'): Excess – 100% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft) Top of Cement – Surface.

1st Stage

Lead - (5200' – Surf'): 525 sx (1,569 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Tail - (6,859' – 5,200'): 255 sx (502 cf) – 12.0 ppg, conventional cement containing: Released to Imaging: 8/19/2014 to 38.53 0.05% sa-1015 5 LBM Kol-Seal 0.125 Poly-E-Flake Yield – 1.97 ft3/sx, Compressive strength: 24 hr – 1500+ psi

<u>Total sacks of cement pumped = 780 sx (2071 cf)</u> Cement volumes are minimums and may be adjusted based on caliper log results & hole conditions.

<u>Production Liner – Single Stage Job (6,710' - 11,242'):</u> Excess – 50% over gauge hole – 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft) Top of Cement – Liner Hanger

250 sx (658 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.63 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Total sacks of cement pumped = 250 sx (658 cf)

6. PROPOSED DRILLING FLUIDS PROGRAM

a) Surface through intermediate casing point

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-500'	FreshWater	8.3-9.4	28-42	NC
8-3/4"	500'-6530'/6859'	Fresh Water LSND	8.3-9.5	40 - 50	6-8.5

b) Intermediate casing point to TD.

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6-1/8"	6,530'/6,859' – 6,530'/11,704'	Fresh Water LSND	8.3-9.5	15-25	6 - 8

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be dried and stored onsite until they are hauled to an NMOCD approved facility for disposal. Any waste water not utilized in the drilling process will be disposed of properly at TnT Environmental Disposal facility or any other approved disposal facility.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing None anticipated
- b) Coring-None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging Program: 8-3/4" section only. CBL/GR for Depth Control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The maximum anticipated bottom hole pressure is +/-2337 psi based on a 9.0 ppg at 6530' (Total Depth - TVD). No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. COMPLETION AND PRODUCTION PLANS

Frac: Lateral will be hydraulically fractured in approximately 25 plug and perf stages with approximately 50,000 bbls of gelled water in 70 Quality Nitrogen Foam and 8,400,000 lbs of proppant (actual design will be modified once the lateral has been drilled, cased and cemented).

Flowback: Well will be flowed back through tubing and captured at the surface via sand separators, flowback manifolds, flowback tanks and related surface equipment, designed to minimize emissions and waste.

Production: Well will be produced up production tubing via gas lift into the permanent production and storage facilities.

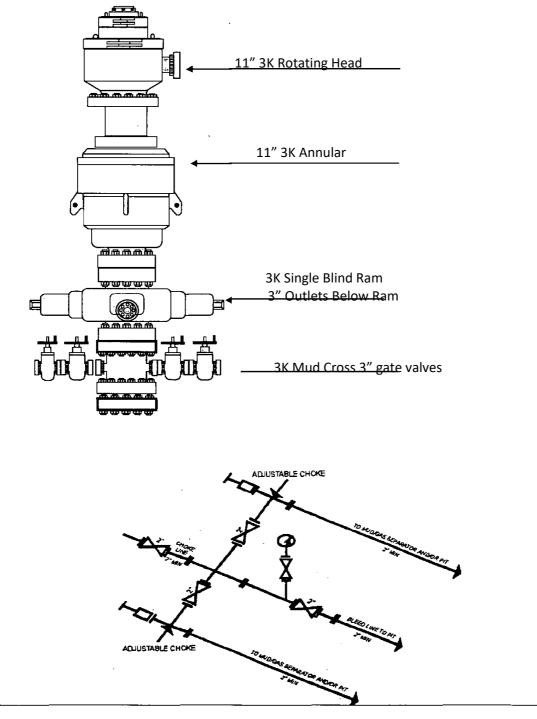
10. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on April 15, 2023. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 15 days.

Exhibit A

WELLHEAD BLOWOUT CONTROL SYSTEM



Attachment To Application For Permit To Drill. Drilling program

San Juan Resources

1499 Blake Street, Suite 10C Denver, Colorado 80202 U.S.A

Regina Ranch Mancos/Dakota Unit 32-10H

Horizontal - Mancos Oil and Gas Well Surface Location: 1775' FNL – 1077' FWL Section 32, T23N, R1W Ungraded GL Elev = 7438' Lat. = 36.182660 deg N Long. = -106.970601 deg W Bottom Hole Location: 74 FSL – 195' FEL Section 32, T23N, R1W Lat. = 36.173246 deg N Long. = -106.957589 W NAD83 Rio Arriba County, New Mexico

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18,1988

Driving Directions to Location:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7; Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM; Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side; Go Left (South-westerly) on private road for 0.3 miles to fork in road; Go Right (North-westerly) for 0.4 miles to San Juan Resources, Inc. Regina Ranch Deep Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources, Inc. Atencio #1 existing location.

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

Formation Tops	Surface (TVD)	MD
San Jose	Surface	Surface
Nacimiento	1399	1399
Ojo Alamo	2604	2604
Kirtland	2758	2758
Fruitland Coal	2872	2872
Pictured Cliffs	2930	2930
Lewis	3007	3007
Cliff House	4690	4690
Menefee	4730	4730
Point Lookout	5158	5158
Mancos	5363	5363
КОР	5978	5980
Mancos/Niobrara A	6258	6276
Mancos/Niobrara B	6370	6420
Mancos/Niobrara C	6488	6639
Mancos/Niobrara C (TARGET) 7" CSG PT	6530	6859
LTP	6530	11324
PBHL/TD	6530	11424
Sanostee/Juan Lopez	6882	
Greenhorn	7330	
Dakota	7453	
Dakota Base	7780	
Morrison	7780	
Total Depth	6530'	11,424'

Drilling Plan

Drill 12 ¼" hole to 500' then set 9 5/8" casing. Drill 8-3/4" vertical hole with fresh water mud system to KOP at ~ 5980'. Build 90' angle to 6859' MD/ 6530' TVD then set 7" casing. Drill 6-1/8" lateral hole to a TD of 11,324' MD/TVD 6530' and set 4-1/2" liner. Plan to cement all casing strings to surface and liner back to 7" casing.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Niobrara C formation encountered first at 6488' TVD.

Substance	Formation	Top Surface (TVD)
Water/Gas	Fruitland Coal	2872
Oil/Gas	Pictured Cliffs	2930
Oil/Gas	Cliffhouse	4690
Gas	Menefee	4730
Gas	Point Lookout	5158
Oil/Gas	Mancos	5363
Oil/Gas	Niobrara A	6258
Oil/Gas	Niobrara B	6370
Oil/Gas	Niobrara C	6488

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

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

- A. Wellhead Equipment 3000 PSI System (See Exhibit A)
 - 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
 - 2. One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on top & one (1) set of pipe rams on bottom complete with hand wheels and extension arms.
 - 3. The choke and kill lines will be connected to outlets between the bottom and top rams, utilizing either the ram body outlet or a drilling spool with side outlets for 2" kill line and minimum 3" choke line
 - 4. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.
 - 5. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
 - 6. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
 - 7. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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 and 9 5/8" slip-on / welded x 11" 3,000 psi casing head.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

26" Conductor = surface to 60' 12-1/4" Surface Hole = Surface to 500' 8-3/4" Intermediate = 6860' MD 6-1/8" Production Liner = 11,424' MD

B. Casing Program - all casing stings are new casing

Casing & Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
16" Conductor (26")	65 ppf	H-40	ST&C	0' - 60-ft BGL	New casing.
9-5/8" (12 1/4")	36 ppf	K-55	LT&C	0' - 500'	New casing. Cement to surface.

7" (8-3/4")	26 ppf	J55	LT&C	0' - 6860'	New Casing. Cement to surface.
4-1/2" (6-1/8")	11.6 ppf	P110	LT&C	6710' – 11,424'	New Casing Cement back to Intermediate

Casing strings below the conductor casing will be tested to .22 psi per foot of

casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:	Collapse -	1.125
	Burst -	1.0
	Jt. Strength -	1.60

5. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed or equivalent slurries depending on service provider selected for cement operations. Actual cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

a) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Conductor Casing Single Stage Job (0-60')

100 sx of Type I Neat 16 ppg

<u>Surface Casing Single Stage Job – (0-500'):</u> Excess – 125% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132 cf/ft) Top of Cement - Surface

Lead – 60 sx (179 cf)– 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Tail - 100 sx (183 cf) – 13.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 1.831 cuft/sx

Compressive strength: 24 hr – 1000+ psi

Total sacks of cement pumped = 160 sx (360 cf)

Intermediate – Single Stage Job (0-6859'): Excess – 100% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft) Top of Cement – Surface.

1st Stage

Lead - (5200' – Surf'): 525 sx (1,569 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Tail - (6,859' – 5,200'): 255 sx (502 cf) – 12.0 ppg, conventional cement containing: Released to Imaging: 8/19/2014 to 38.53 0.05% sa-1015 5 LBM Kol-Seal 0.125 Poly-E-Flake Yield – 1.97 ft3/sx, Compressive strength: 24 hr – 1500+ psi

<u>Total sacks of cement pumped = 780 sx (2071 cf)</u> Cement volumes are minimums and may be adjusted based on caliper log results & hole conditions.

<u>Production Liner – Single Stage Job (6,710' - 11,242'):</u> Excess – 50% over gauge hole – 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft) Top of Cement – Liner Hanger

250 sx (658 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.63 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Total sacks of cement pumped = 250 sx (658 cf)

6. PROPOSED DRILLING FLUIDS PROGRAM

a) Surface through intermediate casing point

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-500'	FreshWater	8.3-9.4	28-42	NC
8-3/4"	500'-6530'/6859'	Fresh Water LSND	8.3-9.5	40 - 50	6-8.5

b) Intermediate casing point to TD.

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6-1/8"	6,530'/6,859' – 6,530'/11,704'	Fresh Water LSND	8.3-9.5	15-25	6 - 8

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be dried and stored onsite until they are hauled to an NMOCD approved facility for disposal. Any waste water not utilized in the drilling process will be disposed of properly at TnT Environmental Disposal facility or any other approved disposal facility.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing None anticipated
- b) Coring-None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging Program: 8-3/4" section only. CBL/GR for Depth Control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The maximum anticipated bottom hole pressure is +/-2337 psi based on a 9.0 ppg at 6530' (Total Depth - TVD). No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. COMPLETION AND PRODUCTION PLANS

Frac: Lateral will be hydraulically fractured in approximately 25 plug and perf stages with approximately 50,000 bbls of gelled water in 70 Quality Nitrogen Foam and 8,400,000 lbs of proppant (actual design will be modified once the lateral has been drilled, cased and cemented).

Flowback: Well will be flowed back through tubing and captured at the surface via sand separators, flowback manifolds, flowback tanks and related surface equipment, designed to minimize emissions and waste.

Production: Well will be produced up production tubing via gas lift into the permanent production and storage facilities.

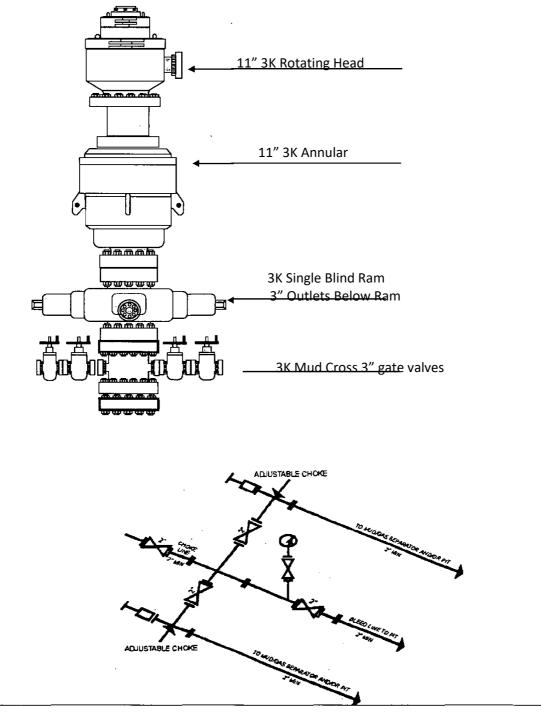
10. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on April 15, 2023. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 15 days.

Exhibit A

WELLHEAD BLOWOUT CONTROL SYSTEM



Attachment To Application For Permit To Drill. Drilling program

San Juan Resources

1499 Blake Street, Suite 10C Denver, Colorado 80202 U.S.A

Regina Ranch Mancos/Dakota Unit 32-10H

Horizontal - Mancos Oil and Gas Well Surface Location: 1775' FNL – 1077' FWL Section 32, T23N, R1W Ungraded GL Elev = 7438' Lat. = 36.182660 deg N Long. = -106.970601 deg W Bottom Hole Location: 74 FSL – 195' FEL Section 32, T23N, R1W Lat. = 36.173246 deg N Long. = -106.957589 W NAD83 Rio Arriba County, New Mexico

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18,1988

Driving Directions to Location:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7; Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM; Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side; Go Left (South-westerly) on private road for 0.3 miles to fork in road; Go Right (North-westerly) for 0.4 miles to San Juan Resources, Inc. Regina Ranch Deep Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources, Inc. Atencio #1 existing location.

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

Formation Tops	Surface (TVD)	MD
San Jose	Surface	Surface
Nacimiento	1399	1399
Ojo Alamo	2604	2604
Kirtland	2758	2758
Fruitland Coal	2872	2872
Pictured Cliffs	2930	2930
Lewis	3007	3007
Cliff House	4690	4690
Menefee	4730	4730
Point Lookout	5158	5158
Mancos	5363	5363
КОР	5978	5980
Mancos/Niobrara A	6258	6276
Mancos/Niobrara B	6370	6420
Mancos/Niobrara C	6488	6639
Mancos/Niobrara C (TARGET) 7" CSG PT	6530	6859
LTP	6530	11324
PBHL/TD	6530	11424
Sanostee/Juan Lopez	6882	
Greenhorn	7330	
Dakota	7453	
Dakota Base	7780	
Morrison	7780	
Total Depth	6530'	11,424'

Drilling Plan

Drill 12 ¼" hole to 500' then set 9 5/8" casing. Drill 8-3/4" vertical hole with fresh water mud system to KOP at ~ 5980'. Build 90' angle to 6859' MD/ 6530' TVD then set 7" casing. Drill 6-1/8" lateral hole to a TD of 11,324' MD/TVD 6530' and set 4-1/2" liner. Plan to cement all casing strings to surface and liner back to 7" casing.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Niobrara C formation encountered first at 6488' TVD.

Substance	Formation	Top Surface (TVD)
Water/Gas	Fruitland Coal	2872
Oil/Gas	Pictured Cliffs	2930
Oil/Gas	Cliffhouse	4690
Gas	Menefee	4730
Gas	Point Lookout	5158
Oil/Gas	Mancos	5363
Oil/Gas	Niobrara A	6258
Oil/Gas	Niobrara B	6370
Oil/Gas	Niobrara C	6488

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

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

- A. Wellhead Equipment 3000 PSI System (See Exhibit A)
 - 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
 - 2. One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on top & one (1) set of pipe rams on bottom complete with hand wheels and extension arms.
 - 3. The choke and kill lines will be connected to outlets between the bottom and top rams, utilizing either the ram body outlet or a drilling spool with side outlets for 2" kill line and minimum 3" choke line
 - 4. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.
 - 5. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
 - 6. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
 - 7. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 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 and 9 5/8" slip-on / welded x 11" 3,000 psi casing head.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

26" Conductor = surface to 60' 12-1/4" Surface Hole = Surface to 500' 8-3/4" Intermediate = 6860' MD 6-1/8" Production Liner = 11,424' MD

B. Casing Program - all casing stings are new casing

Casing	& Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
16" Co	nductor (26")	65 ppf	H-40	ST&C	0' - 60-ft BGL	New casing.
9-5/8" (12 1/4")	36 ppf	K-55	LT&C	0' - 500'	New casing. Cement to surface.

7" (8-3/4")	26 ppf	J55	LT&C	0' - 6860'	New Casing. Cement to surface.
4-1/2" (6-1/8")	11.6 ppf	P110	LT&C	6710' – 11,424'	New Casing Cement back to Intermediate

Casing strings below the conductor casing will be tested to .22 psi per foot of

casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:	Collapse -	1.125
	Burst -	1.0
	Jt. Strength -	1.60

5. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed or equivalent slurries depending on service provider selected for cement operations. Actual cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

a) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Conductor Casing Single Stage Job (0-60')

100 sx of Type I Neat 16 ppg

<u>Surface Casing Single Stage Job – (0-500'):</u> Excess – 125% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132 cf/ft) Top of Cement - Surface

Lead – 60 sx (179 cf)– 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Tail - 100 sx (183 cf) – 13.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 1.831 cuft/sx

Compressive strength: 24 hr – 1000+ psi

Total sacks of cement pumped = 160 sx (360 cf)

Intermediate – Single Stage Job (0-6859'): Excess – 100% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft) Top of Cement – Surface.

1st Stage

Lead - (5200' – Surf'): 525 sx (1,569 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.989 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Tail - (6,859' – 5,200'): 255 sx (502 cf) – 12.0 ppg, conventional cement containing: Released to Imaging: 8/19/2014 to 38.53 0.05% sa-1015 5 LBM Kol-Seal 0.125 Poly-E-Flake Yield – 1.97 ft3/sx, Compressive strength: 24 hr – 1500+ psi

<u>Total sacks of cement pumped = 780 sx (2071 cf)</u> Cement volumes are minimums and may be adjusted based on caliper log results & hole conditions.

<u>Production Liner – Single Stage Job (6,710' - 11,242'):</u> Excess – 50% over gauge hole – 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft) Top of Cement – Liner Hanger

250 sx (658 cf) – 11.5 ppg, conventional cement containing: Cement – Halliburton VARICEM CEMENT 0.125# Poly-E-Flake 0.25# Kwick Seal Yield – 2.63 cuft/sx

Compressive strength: 24 hr - 1000+ psi

Total sacks of cement pumped = 250 sx (658 cf)

6. PROPOSED DRILLING FLUIDS PROGRAM

a) Surface through intermediate casing point

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-500'	FreshWater	8.3-9.4	28-42	NC
8-3/4"	500'-6530'/6859'	Fresh Water LSND	8.3-9.5	40 - 50	6-8.5

b) Intermediate casing point to TD.

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6-1/8"	6,530'/6,859' – 6,530'/11,704'	Fresh Water LSND	8.3-9.5	15-25	6 - 8

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Drill cuttings will be dried and stored onsite until they are hauled to an NMOCD approved facility for disposal. Any waste water not utilized in the drilling process will be disposed of properly at TnT Environmental Disposal facility or any other approved disposal facility.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing None anticipated
- b) Coring-None anticipated.
- c) Mud Logging Mud loggers will be on location from surface casing point to TD.
- d) Logging Program: 8-3/4" section only. CBL/GR for Depth Control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The maximum anticipated bottom hole pressure is +/-2337 psi based on a 9.0 ppg at 6530' (Total Depth - TVD). No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. COMPLETION AND PRODUCTION PLANS

Frac: Lateral will be hydraulically fractured in approximately 25 plug and perf stages with approximately 50,000 bbls of gelled water in 70 Quality Nitrogen Foam and 8,400,000 lbs of proppant (actual design will be modified once the lateral has been drilled, cased and cemented).

Flowback: Well will be flowed back through tubing and captured at the surface via sand separators, flowback manifolds, flowback tanks and related surface equipment, designed to minimize emissions and waste.

Production: Well will be produced up production tubing via gas lift into the permanent production and storage facilities.

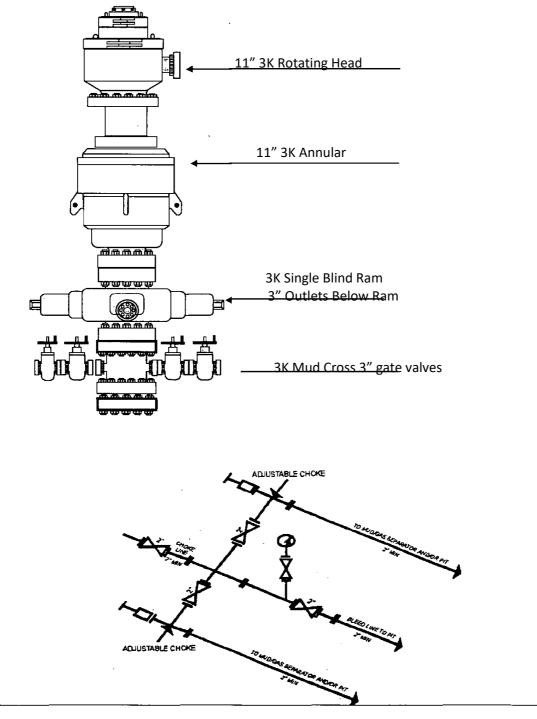
10. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on April 15, 2023. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 15 days.

Exhibit A

WELLHEAD BLOWOUT CONTROL SYSTEM





San Juan Resources

Rio Arriba Counrty, NM 23M 01W SEC 32 REGINA RANCH DEEP UNIT 32-10H

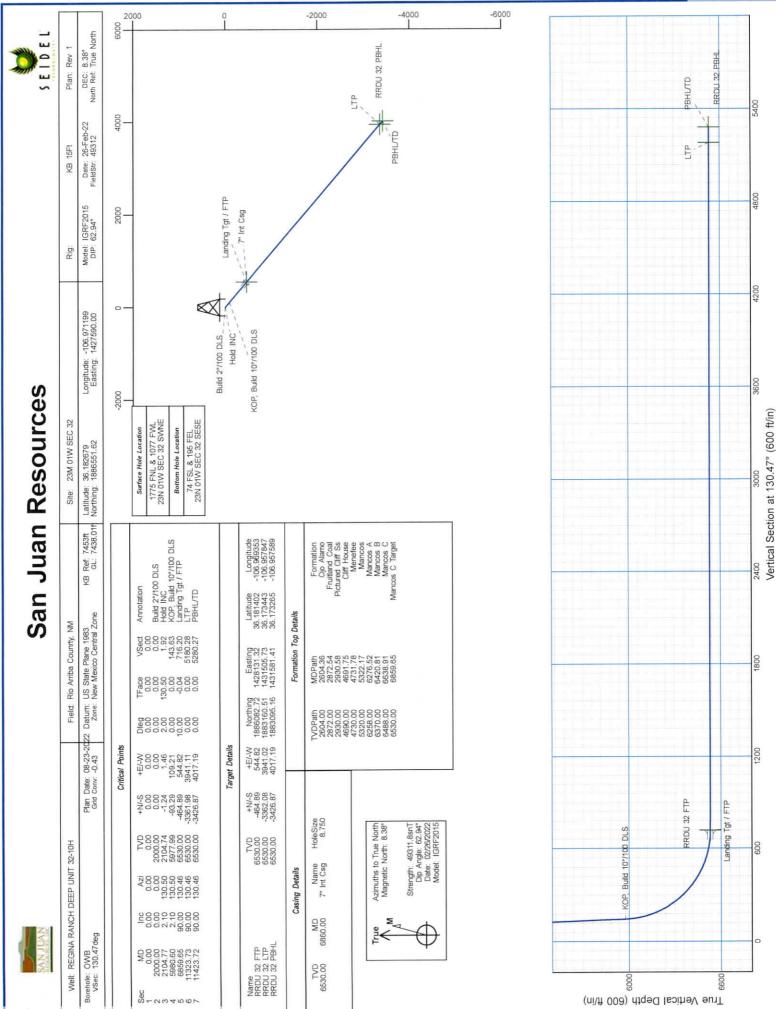
OWB

Plan: Rev 1

Standard Planning Report

23 August, 2022





<u>Released to Imaging: 8/19/2024 9:38:53 AM</u>

Page 65 of 139

SAN JUAN				F	Planning Re	eport				S E I D E
Database: Company: Project: Site: Vell: Vellbore: Design:	San Ju Rio Arr 23M 0	0000.1 Seidelte Ian Resources riba Counrty, N 1W SEC 32 IA RANCH DE		н	TVD Refer MD Refere North Refe	ence:		Well REGINA RA KB 15Ft @ 7453. KB 15Ft @ 7453. True Minimum Curvatu	.00ft .00ft	JNIT 32-10H
Project	Rio Arri	ba Counrty, N	N							
Map System: Geo Datum: Map Zone:	North Am	Plane 1983 nerican Datum tico Central Zo			System Dat	tum:		ean Sea Level sing geodetic scal	le factor	
Site	23M 01	W SEC 32								
Site Position: From: Position Uncertainty		Long	Northi Eastin 0.00 ft Slot R	g:	110 000 000	,551.62 usft ,590.00 usft 13.200 in	Latitude: Longitude: Grid Converg	jence:		36.18267 -106.97119 -0.43
Well	REGINA	A RANCH DEE	P UNIT 32-10H	I, 23N 01W SE	C 32 SWNE					
Well Position Position Uncertainty	+N/-S +E/-W		0.00 ft Ea	orthing: sting:		1,886,551.62 1,427,590.00) usft Lor	itude: ngitude:		36.18267 -106.97119 7,438.02
			0.00 ft We	ellhead Elevation	on:	7,438	.02 ft Gro	ound Level:		7,450.02
Wellbore Magnetics	OWB	del Name	0.00 π we		Declina		Dip /	Angle		Strength
	OWB						Dip /			
Magnetics	OWB Mo	del Name		e Date	Declina	ition	Dip /	Angle °)		Strength nT)
Magnetics Design Audit Notes:	OWB	del Name		e Date 02/26/22	Declina	tion 8.38	Dip /	Angle °) 62.94		Strength nT)
	OWB Mo	del Name IGRF2015	Sample	e Date 02/26/22 e: Pl	Declina (°)	tion 8.38 Tid +t	Dip / (Angle °) 62.94 (Dire ((Strength nT)
Magnetics Design Audit Notes: Version: Vertical Section:	OWB Mo	del Name IGRF2015	Sample Phase Depth From (TV (ft)	e Date 02/26/22 e: Pl	Declina (°) _AN +N/-S (ft)	tion 8.38 Tid +t	Dip / (e On Depth: E/-W (ft)	Angle °) 62.94 (Dire ((0.00 ection (°)	Strength nT)
Magnetics Design Audit Notes: /ersion: /ertical Section: Plan Sections Measured	OWB Mo	del Name IGRF2015	Sample Phase Depth From (TV (ft)	e Date 02/26/22 e: Pl	Declina (°) _AN +N/-S (ft)	tion 8.38 Tid +t	Dip / (e On Depth: E/-W (ft)	Angle °) 62.94 (Dire ((0.00 ection (°)	Strength nT)
Magnetics Design Audit Notes: Vertical Section: Vertical Sections Plan Sections Measured Depth Incl	OWB Mo Rev 1	del Name IGRF2015	Sample Phase Depth From (TV (ft) 0.00 Vertical Depth	e Date 02/26/22 e: Pl /D) +N/-S	Declina (°) _AN +N/-S (ft) 	tion 8.38 Tid +1 0 Dogleg Rate	Dip / (e On Depth: E/-W (ft) 0.00 Build Rate (°/100usft) 0.00 0.00 0.00 2.00	Angle °) 62.94 (Dire ((130 Turn Rate (°/100usft) 0.00 0.00 0.00	() 0.00 (°) 0.47 TFO	Strength nT) 49,312

.

-			
SA	Ν	JU	A.

Planning Report



Database:	EDM 5000.1 Seideltech	Local Co-ordinate Reference:	Well REGINA RANCH DEEP UNIT 32-10H
Company:	San Juan Resources	TVD Reference:	KB 15Ft @ 7453.00ft
Project:	Rio Arriba Counrty, NM	MD Reference:	KB 15Ft @ 7453.00ft
Site:	23M 01W SEC 32	North Reference:	True
Well:	REGINA RANCH DEEP UNIT 32-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Rev 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00						
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
			500.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.000	2.22	1 2 2 2 2 2 2 2		0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,000.00	0.00					
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2°/100	DIS								
		120 50	2,099.98	-1.13	1.33	1.75	2.00	2.00	0.00
2,100.00	2.00	130.50							0.00
2,104.77	2.10	130.50	2,104.74	-1.24	1.46	1.92	2.00	2.00	0.00
Hold INC									
2,200.00	2.10	130.50	2,199.92	-3.51	4.10	5.40	0.00	0.00	0.00
2,300.00	2.10	130.50	2,299.85	-5.88	6.88	9.05	0.00	0.00	0.00
2,000.00								101072000	11 201 20201
2,400.00	2.10	130.50	2,399.78	-8.26	9.66	12.71	0.00	0.00	0.00
2,500.01	2.10	130.50	2,499.72	-10.63	12.44	16.37	0.00	0.00	0.00
2,600.01	2.10	130.50	2,599.65	-13.00	15.22	20.02	0.00	0.00	0.00
2,604.36	2.10	130.50	2,604.00	-13.11	15.35	20.18	0.00	0.00	0.00
	2.10	100.00	2,001100	1.2111	11. To 10. To 10.				
Ojo Alamo		10/212 2021		15.00	10.00	00.00	0.00	0.00	0.00
2,700.01	2.10	130.50	2,699.58	-15.38	18.00	23.68	0.00	0.00	0.00
2,800.01	2.10	130.50	2,799.52	-17.75	20.78	27.34	0.00	0.00	0.00
	2.10	130.50	2,872.00	-19.48	22.80	29.99	0.00	0.00	0.00
2,872.54		130.50	2,072.00	-13.40	22.00	20.00	0.00	0.00	0.00
Fruitland Co					Conversion for	Subara a subara a			
2,900.01	2.10	130.50	2,899.45	-20.13	23.56	30.99	0.00	0.00	0.00
2,930.58	2.10	130.50	2,930.00	-20.85	24.41	32.11	0.00	0.00	0.00
Pictured Clif									
		130.50	2,999.38	-22.50	26.34	34.65	0.00	0.00	0.00
3,000.01	2.10	130.50	2,599.30	-22.00	20.04	54.05			
3,100.01	2.10	130.50	3,099.32	-24.88	29.12	38.30	0.00	0.00	0.00
3,200.01	2.10	130.50	3,199.25	-27.25	31.90	41.96	0.00	0.00	0.00
3,300.01	2.10	130.50	3,299.18	-29.63	34.68	45.62	0.00	0.00	0.00
e te e e te t		130.50	3,399.12	-32.00	37.46	49.27	0.00	0.00	0.00
3,400.01	2.10						0.00	0.00	0.00
3,500.01	2.10	130.50	3,499.05	-34.38	40.24	52.93	0.00	0.00	0.00
3,600.01	2.10	130.50	3,598.98	-36.75	43.02	56,59	0.00	0.00	0.00
3,700.01	2.10	130.50	3,698.92	-39.13	45.81	60.24	0.00	0.00	0.00
3,800.01	2.10	130.50	3,798.85	-41.50	48.59	63.90	0.00	0.00	0.00
								0.00	0.00
3,900.01	2.10	130.50	3,898.78	-43.88	51.37	67.55	0.00		
4,000.01	2.10	130.50	3,998.72	-46.25	54.15	71.21	0.00	0.00	0.00
4,100.01	2.10	130.50	4,098.65	-48.63	56.93	74.87	0.00	0.00	0.00
				-51.00	59.71	78.52	0.00	0.00	0.00
4,200.01	2.10	130.50	4,198.58						0.00
4,300.01	2.10	130.50 130.50	4,298.52 4,398.45	-53.38 -55.75	62.49 65.27	82.18 85.84	0.00	0.00	0.00
4,400.01	2.10								

08/23/22 8:03:12PM

.



Planning Report



Database:	EDM 5000.1 Seideltech	Local Co-ordinate Reference:	Well REGINA RANCH DEEP UNIT 32-10H
Company:	San Juan Resources	TVD Reference:	KB 15Ft @ 7453.00ft
Project:	Rio Arriba Counrty, NM	MD Reference:	KB 15Ft @ 7453.00ft
Site:	23M 01W SEC 32	North Reference:	True
Well:	REGINA RANCH DEEP UNIT 32-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Rev 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.01	2.10	130.50	4,498.38	-58.13	68.05	89.49	0.00	0.00	0.00
4,600.01	2.10	130.50	4,598.32	-60.50 -62.68	70.83 73.38	93.15 96.50	0.00	0.00	0.00
4,691.75	2.10	130.50	4,030.00	-02.00	70.00	55.55	0.00		
Cliff House 4,700.01	2.10	130.50	4,698.25	-62.87	73.61	96.80	0.00	0.00	0.00
4,731.78	2.10	130.50	4,730.00	-63.63	74.49	97.97	0.00	0.00	0.00
Menefee 4,800.01	2.10	130.50	4,798.18	-65.25	76.39	100.46	0.00	0.00	0.00
			With Dependent of the					0.00	0.00
4,900.01	2.10	130.50	4,898.12	-67.62	79.17 81.95	104.12 107.77	0.00	0.00	0.00
5,000.01	2.10	130.50	4,998.05	-70.00 -72.37	84.73	111.43	0.00	0.00	0.00
5,100.01	2.10	130.50	5,097.98		87.51	115.09	0.00	0.00	0.00
5,200.01	2.10	130.50	5,197.92	-74.75 -77.12	90.29	118.74	0.00	0.00	0.00
5,300.01	2.10	130.50	5,297.85				0.00	0.00	0.00
5,322.17	2.10	130.50	5,320.00	-77.65	90.90	119.55	0.00	0.00	0.00
Mancos	2.10	130.50	5,397.78	-79.50	93.07	122.40	0.00	0.00	0.00
5,400.01	2.10	130.50	5,497.72	-81.87	95.85	126.05	0.00	0.00	0.00
5,500.01	2.10	130.50	5,597.65	-84.25	98.63	129.71	0.00	0.00	0.00
5,600.01 5,700.01	2.10	130.50	5,697.58	-86.62	101.41	133.37	0.00	0.00	0.00
	2.10	130.50	5,797.52	-89.00	104.19	137.02	0.00	0.00	0.00
5,800.01	2.10	130.50	5,897.45	-91.37	106.97	140.68	0.00	0.00	0.00
5,900.01 5,980.60	2.10	130.50	5,977.99	-93.29	109.21	143.63	0.00	0.00	0.00
KOP, Build									
6,000.01	4.03	130.49	5,997.37	-93.96	110.00	144.66	9.99	9.99	-0.10
6,100.01	14.03	130.47	6,096.00	-104.14	121.93	160.35	10.00	10.00	-0.01
6,200.01	24.03	130.47	6,190.41	-125.28	146.71	192.92	10.00	10.00	0.00
6,276.52	31.69	130.47	6,258.00	-148.47	173.89	228.65	10.00	10.00	0.00
Mancos A				450.74	102 50	241.40	9.99	9.99	0.00
6,300.01	34.03	130.47	6,277.73	-156.74	183.59		10.00	10.00	0.00
6,400.01	44.03	130.47	6,355.31	-197.57	231.44	304.30 319.03	10.00	10.00	0.00
6,420.81	46.12	130.47	6,370.00	-207.13	242.65	319.03	10.01	10.01	0,00
Mancos B						070 70	10.00	10.00	0.00
6,500.01	54.03	130.47	6,420.79	-246.51	288.82	379.72	10.00 10.00	10.00 10.00	0.00
6,600.01	64.03	130.47	6,472.17	-302.09	353.97	465.36		10.00	0.00
6,638.91	67.93	130.47	6,488.00	-325.14	381.00	500.88	10.00	10.00	0.00
Mancos C 6.700.01	74.03	130.47	6,507.90	-362.62	424.93	558.62	10.00	10.00	0.00
6,800.01	84.03	130.47	6,526.90	-426.25	499.52	656.67	10.00	10.00	0.00
6,859.65	90.00	130.46	6,530.00	-464.89	544.82	716.20	10.00	10.00	0.00
Construction of the second second second	/ FTP - Mancos								
6,860.00	90.00	130.46	6,530.00	-465.11	545.08	716.55	0.00	0.00	0.00
7" Int Csg									0.00
6,900.01	90.00	130.46	6,530.00	-491.08	575.52	756.56	0.00	0.00	0.00
7,000.01	90.00	130.46	6,530.00	-555.98	651.60	856.56	0.00	0.00	0.00
7,100.01	[*] 90.00	130.46	6,530.00	-620.88	727.69	956.56	0.00	0.00	0.00
7,200.01	90.00	130.46	6,530.00	-685.77	803.77	1,056.56	0.00	0.00	0.00
7,300.01	90.00	130.46	6,530.00	-750.67	879.85	1,156.56	0.00	0.00	0.00
7,400.01	90.00	130.46	6,530.00	-815.57	955.93	1,256.56	0.00	0.00	0.00
7,500.02	90.00	130.46	6,530.00	-880.47	1,032.01	1,356.56	0.00	0.00	0.00
7,600.02	90.00	130.46	6,530.00	-945.37	1,108.09	1,456.56	0.00	0.00	0.00
7,700.02	90.00	130.46	6,530.00	-1,010.26	1,184.17	1,556.56	0.00	0.00	0.00
7,800.02	90.00	130.46	6,530.00	-1,075.16	1,260.25	1,656.56	0.00	0.00	0.00
7,900.02	90.00	130.46	6,530.00	-1,140.06	1,336.33	1,756.56	0.00	0.00	0.00

08/23/22 8:03:12PM

COMPASS 5000.1 Build 70

.

SAN JUAN





Database:	EDM 5000.1 Seideltech	Local Co-ordinate Reference:	Well REGINA RANCH DEEP UNIT 32-10H
Company:	San Juan Resources	TVD Reference:	KB 15Ft @ 7453.00ft
Project:	Rio Arriba Counrty, NM	MD Reference:	KB 15Ft @ 7453.00ft
Site:	23M 01W SEC 32	North Reference:	True
Well:	REGINA RANCH DEEP UNIT 32-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Rev 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.02	90.00	130.46	6,530.00	-1,204.96	1,412.41	1,856.56	0.00	0.00	0.00
8,100.02	90.00	130.46	6,530.00	-1,269.86	1,488.49	1,956.56	0.00	0.00	0.00
8,200.02 8,300.02 8,400.02 8,500.02 8,600.02 8,700.02 8,800.02 8,800.02 8,900.02	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	130.46 130.46 130.46 130.46 130.46 130.46 130.46 130.46 130.46	6,530.00 6,530.00 6,530.00 6,530.00 6,530.00 6,530.00 6,530.00 6,530.00	-1,334.75 -1,399.65 -1,464.55 -1,529.45 -1,594.35 -1,659.24 -1,724.14 -1,789.04	1,564.57 1,640.65 1,716.73 1,792.82 1,868.90 1,944.98 2,021.06 2,097.14	2,056.56 2,156.57 2,256.57 2,356.57 2,456.57 2,556.57 2,556.57 2,756.57	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
9,000.02 9,100.02	90.00 90.00	130.46 130.46	6,530.00 6,530.00	-1,853.94 -1,918.84	2,173.22 2,249.30	2,856.57 2,956.57	0.00	0.00	0.00
9,200.02	90.00	130.46	6,530.00	-1,983.74	2,325.38	3,056.57	0.00	0.00	0.00
9,300.02	90.00	130.46	6,530.00	-2,048.63	2,401.46	3,156.57	0.00	0.00	0.00
9,400.02	90.00	130.46	6,530.00	-2,113.53	2,477.54	3,256.57	0.00	0.00	0.00
9,500.02	90.00	130.46	6,530.00	-2,178.43	2,553.62	3,356.57	0.00	0.00	0.00
9,600.02	90.00	130.46	6,530.00	-2,243.33	2,629.70	3,456.57	0.00	0.00	0.00
9,700.02	90.00	130.46	6,530.00	-2,308.23	2,705.78	3,556.57	0.00	0.00	0.00
9,800.02	90.00	130.46	6,530.00	-2,373.12	2,781.87	3,656.57	0.00	0.00	0.00
9,900.02	90.00	130.46	6,530.00	-2,438.02	2,857.95	3,756.57	0.00	0.00	0.00
10,000.02	90.00	130.46	6,530.00	-2,502.92	2,934.03	3,856.57	0.00	0.00	0.00
10,100.02	90.00	130.46	6,530.00	-2,567.82	3,010.11	3,956.57	0.00	0.00	0.00
10,200.02	90.00	130.46	6,530.00	-2,632.72	3,086.19	4,056.57	0.00	0.00	0.00
10,300.02	90.00	130.46	6,530.00	-2,697.61	3,162.27	4,156.57	0.00	0.00	0.00
10,400.02	90.00	130.46	6,530.00	-2,762.51	3,238.35	4,256.57	0.00	0.00	0.00
10,500.02	90.00	130.46	6,530.00	-2,827.41	3,314.43	4,356.57	0.00	0.00	0.00
10,600.02	90.00	130.46	6,530.00	-2,892.31	3,390.51	4,456.57	0.00	0.00	0.00
10,700.02	90.00	130.46	6,530.00	-2,957.21	3,466.59	4,556.57	0.00	0.00	0.00
10,800.02	90.00	130.46	6,530.00	-3,022.10	3,542.67	4,656.57	0.00	0.00	0.00
10,900.02	90.00	130.46	6,530.00	-3,087.00	3,618.75	4,756.57	0.00	0.00	0.00
11,000.02	90.00	130.46	6,530.00	-3,151.90	3,694.83	4,856.57	0.00	0.00	0.00
11,100.02	90.00	130.46	6,530.00	-3,216.80	3,770.91	4,956.57	0.00	0.00	0.00
11,200.02 11,300.02 11,323.73 LTP	90.00 90.00 90.00	130.46 130.46 130.46	6,530.00 6,530.00 6,530.00	-3,281.70 -3,346.60 -3,361.98	3,847.00 3,923.08 3,941.11	5,056.57 5,156.57 5,180.28	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
11,400.02 11,423.72 PBHL/TD	90.00 90.00	130.46 130.46	6,530.00 6,530.00	-3,411.49 -3,426.87	3,999.16 4,017.19	5,256.57 5,280.27	0.00 0.00	0.00 0.00	0.00 0.00

	F	-		
SA.	N	TT	LA.	7

Planning Report



Database:	EDM 5000.1 Seideltech	Local Co-ordinate Reference:	Well REGINA RANCH DEEP UNIT 32-10H
Company:	San Juan Resources	TVD Reference:	KB 15Ft @ 7453.00ft
Project:	Rio Arriba Counrty, NM	MD Reference:	KB 15Ft @ 7453.00ft
Site:	23M 01W SEC 32	North Reference:	True
Well:	REGINA RANCH DEEP UNIT 32-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Rev 1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RRDU 32 PBHL - plan hits target ce - Point	0.00 nter	0.00	6,530.00	-3,426.87	4,017.19	1,883,095.17	1,431,581.41	36.173265	-106.957589
RRDU 32 FTP - plan hits target ce - Point	0.00 nter	0.00	6,530.00	-464.89	544.82	1,886,082.73	1,428,131.32	36.181402	-106.969353
RRDU 32 LTP	0.00	0.00	6,530.00	-3,362.08	3,941.02	1,883,160.52	1,431,505.74	36.173443	-106.957847

RRDU 32 LTP 0.00 0.00 6,530.00 -3,362.08 3,941.02 1,883,160.52 1,431,505.74 36.173443 - plan misses target center by 0.13ft at 11323.73ft MD (6530.00 TVD, -3361.98 N, 3941.11 E) - Point

Casing Points

Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)		Name	(in)	(in)
6,860.	00 6,530.00	7" Int Csg		7.000	8.750

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,604.36	2,604.00	Ojo Alamo			
2,872.54	2,872.00	Fruitland Coal			
2,930.58	2,930.00	Pictured Cliff Ss			
4,691.75	4,690.00	Cliff House			
4,731.78	4,730.00	Menefee			
5,322.17	5,320.00	Mancos			
6,276.52	6,258.00	Mancos A			
6,420.81	6,370.00	Mancos B			
6,638.91	6,488.00	Mancos C			
6,859.65	6,530.00	Mancos C Target			

Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
2,000.00	2,000.00	0.00	0.00	Build 2°/100 DLS
2,104.77	2,104.74	-1.24	1.46	Hold INC
5,980.60	5,977.99	-93.29	109.21	KOP, Build 10°/100 DLS
6,859.65	6,530.00	-464.89	544.82	Landing Tgt / FTP
11,323.73	6,530.00	-3,361.98	3,941.11	LTP
11,423.72	6,530.00	-3,426.87	4,017.19	PBHL/TD

08/23/22 8:03:12PM

Received by OCD: 6/24/2024 9:31:39 AM Page 71 of 139 VAFMSS SUPPORT SUPPORT U.S. Department of the Interior BUREAU OF LAND MANAGEMENT 06/24/2024 APD ID: 10400086735 Submission Date: 09/15/2022 Operator Name: SAN JUAN RESOURCES INCORPORATED Highlighted data reflects the most recent changes Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Well Work Type: Drill

Well Type: OIL WELL

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Regina_Ranch_Deep_Unit_32_10H_20220815145735.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? YES

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES Attach Well map: Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Regina_Ranch_Mancos_Dakota_Unit_32_10H_Exisitng_Wells_Map_20220909115311.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: San Juan Resources Surface Use Plan of Operation 3 Location of Existing or Proposed Production Facilities Production facilities for the Regina Ranch Mancos Dakota 32 10H would be located on the southeast side of the proposed well pad. Facilities on location may include, but are not limited to (including facilities that may occur through the life of the well), vertical and/or horizontal separators of varying types, 500 bbl. oil and water tanks, 750 bbl. flash tanks, below grade tanks of varying sizes, about grade steel pit tank, vapor recovery units, vapor recovery lower, LACT building and equipment, fuel gas scrubber, chemical skids, gas lift skid, gas lift compressor, sales compressor, electric/automation buildings and equipment, capstone generators or other generator types, power poles, communication lower, combustors, cathodic protection equipment, various pumps, meter urns, pipeline risers and artificial lift equipment.

Production Facilities map:

Regina_Ranch_Mancos_Dakota_Unit_32_10H_Location_Layout_20220909153036.pdf

Section 5 - Location an	d Types of Water Supply	/
Water Source Tabl	e	
Water source type: GW WELL		
Water source use type:	SURFACE CASING	
	INTERMEDIATE/PRODUCTION CASING STIMULATION	
Source latitude: 36.070526		Source longitude: -107.046578
Source datum: NAD83		
Water source permit type:	WATER RIGHT	
Water source transport method:	TRUCKING	
Source land ownership: COMMER	CIAL	
Source transportation land owners	ship: COMMERCIAL	
Water source volume (barrels): 30	00	Source volume (acre-feet): 0.386
Source volume (gal): 126000		

Received by OCD: 6/24/2024 9:31:39 AM

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Water source and transportation

Water_Source_Map_20230120124523.pdf

Water source comments:

New water well? N

New Water Well Info

Well Longitude:	Well datum:
Est thickness of aquifer:	
Well casing type:	
Well casing inside diameter	(in.):
Used casing source:	
Drill material:	
Grout depth:	
Casing top depth (ft.):	
Completion Method:	
	Est thickness of aquifer: Well casing type: Well casing inside diameter Used casing source: Drill material: Grout depth: Casing top depth (ft.):

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: All surface infrastructure would be constructed utilizing native borrow within the permitted area to create a balanced working surface. Surfacing material of fill material, such as sandstone, gravel, pit run, or road base would be used if needed and economically viable and would be obtained from an approved location. SJR will maximize the use of native material within the proposed project area to reduce or eliminate the need to haul in foreign materials. Material may be imported and used for any of the following reasons; low water crossings (pit run and road base), road surfacing (road base, gravel or sandstone), erosion control (riprap cobble stone), barricades (boulders), under and surrounding equipment (gravel), and filling soft or muddy areas (sandstone, pit run, road base or gravel) San Juan Resources Surface Use Plan 5 Construction Materials A map of borrow pit location where SJR may obtain material can be found in Appendix F. The borrow pits are labeled with operating company name if applicable and legal location to the quarter-quarter.

Construction Materials source location

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Section 7 - Methods for Handling

Waste type: COMPLETIONS/STIMULATION

Waste content description: All waste will be transported to Envirotech Landfarm Closed loop

Amount of waste: 10000 barrels

Waste disposal frequency : Weekly

Safe containment description: All waste will be transported to Envirotech Landfarm

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: STATE FACILITY Disposal type description:

Disposal location description: Envirotech Landfarm Rd 350 San Juan County Nm

Waste type: SEWAGE

Waste content description: San Juan Resources, LLC Surface Use Plan of Operations 6 (Methods for Handling Waste) Portable toilets would be provided and maintained as needed during construction. **Amount of waste:**

Waste disposal frequency : One Time Only

Safe containment description: Portable toilets

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

FACILITY Disposal type description:

Disposal location description: Approved Disposal Facility Site

Waste type: GARBAGE

Waste content description: San Juan Resources, LLC Surface Use Plan of Operations Section 6 (Methods for Handling Waste) All garbage and trash would be placed in enclosed metal trash containers. The trash and garbage would be hauled off site and dumped in an approved landfill, as needed. **Amount of waste:** 50

Waste disposal frequency : One Time Only

Safe containment description: Metal trash containers

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY Disposal type description:

Disposal location description: Approved Disposal Facility Site

Reserve Pit

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location San Juan Resources, LLC Surface Use Plan of Operations Section 6 (Methods for Handling Waste) All cuttings would be placed in roll-off bins and hauled to a commercial disposal facility or land farm.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area volume (cu. yd.)

Cuttings area depth (ft.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Drilling_Layout_Diagram_20230120124336.pdf

Completions_Layout_Diagram_20230120124343.pdf

Comments: San Juan Resources, LLC Surface Use Plan of Operations Section 8 (Well Site) Topsoil removal, storage, and protection is described in detail in the Surface Reclamation Plan (Appendix A). During construction, the proposed well pad would be leveled to provide adequate space and a level working surface for vehicles and equipment. Excavated materials from cuts would be used on fill portions of the well pad to level the surface. The approximate cuts, fills, and well pad orientation is shown on the cut/fill worksheet and cross section diagrams in the survey plats found in Appendix C. Additionally, please see Appendix G for the proposed Well Pad Facility Diagram showing long term well pad layout, reclamation areas, and disturbance

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

acreage; Well Pad Drilling Diagrams showing the location and orientation of the drill rig; and the Well Pad Completion Diagram, showing the location and orientation of the completion equipment. Drilling of the proposed well would require an expansion of 400-foot by 400-foot well pad (4.85 acres). A 40-foot construction zone is proposed on the west, north and east sides of the proposed pad. This entire area would be utilized during construction, setting of production equipment, drilling and completion phases.

Section 10 - Plans for Surface Reclamation

 Type of disturbance: No New Surface Disturbance
 Multiple Well Pad Name: LINDRITH EAST DEEP UNIT 24

Multiple Well Pad Number: 001H

Recontouring

Drainage/Erosion control construction: San Juan Resources, LLC Reclamation Plan Section 4 (Reclamation Techniques for Successful Revegetation) Section 4.3 The BLM representative and the SJR representative would work in collaboration to develop site-specific erosion control or water management features and to identify installation locations. Potential erosion control or water management features that may be used include (but are not limited to) water bars or rolling dips for roads, sediment basins or sediment traps, check dams, silt fencing, bellholes upstream of culverts, outlet protection for culverts, erosion control blankets, straw bales, and straw wattles. During interim reclamation, areas of the project that are not needed for long term well operations and maintenance will be recontoured to re-establish disturbed terrain and blend into the surrounding landscape. The natural drainage network would be re-established as practicable with necessary diversions and silt traps around the long-term project footprint.

Drainage/Erosion control reclamation: San Juan Resources, LLC Reclamation Plan Section 4 (Reclamation Techniques for Successful Revegetation) Section 4.3 During interim reclamation, areas of the project that are not needed for long term well operations and maintenance will be recontoured to re-establish disturbed terrain and blend into the surrounding landscape. The natural drainage network would be re-established as practicable with necessary diversions and silt traps around the long-term project footprint.

Well pad proposed disturbance (acres):	Well pad interim reclamation (acres): (Well pad long term disturbance (acres): 0
Road proposed disturbance (acres):	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0
Powerline proposed disturbance (acres):	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres):	Pipeline interim reclamation (acres): 0	Pipeline long term disturbance (acres): 0
Other proposed disturbance (acres):	Other interim reclamation (acres): 0	Other long term disturbance (acres): 0
Total proposed disturbance: 0	Total interim reclamation: 0	Total long term disturbance: 0

Disturbance Comments:

Reconstruction method: San Juan Resources, LLC Reclamation Plan 4.4 Seedbed Preparation For cut and fill slopes, initial seedbed preparation will consist of pushing (dozer)/excavation (excavator)/hauling (belly scraper) the unneeded fill slope material and placing it within the cut slopes. Natural rolling contours would be implemented to break up the surface and aid in removing signs of the sharp well pad corners once vegetation established. Emphasis would be placed on restoration of the existing drainage patterns and landforms to preconstruction conditions, to the extent practicable. Within areas that would be reseeded, stockpiled topsoil would be evenly redistributed prior to final seedbed preparation. Seedbed preparation within compacted areas will be ripped to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. If large clumps/clods result from the ripping process, disking would be conducted perpendicular to slopes in order to provide terracing and minimize runoff and erosion. Final seedbed preparation would consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

Received by OCD: 6/24/2024 9:31:39 AM

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Topsoil redistribution: San Juan Resources LLC, Reclamation Plan 4.2Topsoil Replacement The upper six inches of topsoil (if available) would be stripped following vegetation mulching. Topsoil would not be mixed with the underlying subsoil horizons and would be stockpiled as a berm/windrow along the interior perimeter of the construction buffer zone. Topsoil and sub-surface soils would be replaced in the proper order, prior to final seedbed preparation. Redistribution of topsoil shall not be done when the ground or topsoil is wet. Vehicle/equipment traffic would not be allowed to cross topsoil stockpiles. If topsoil is stored for a length of time such that nutrients are depleted from the topsoil, amendments would be added to the topsoil as advised by the SJR environmental scientist or appropriate agent/contractor.

Soil treatment: San Juan Resources, LLC Section 4.5 (Soil Amendments) Soil amendments would be added to the topsoil, if needed, as advised by the SJR environmental scientist or appropriate surface managing agency.

Existing Vegetation at the well pad: San Juan Resources, LLC Reclamation Plan Section 2 (Project Description) Section 2.2 (Well Pad) The proposed Regina Ranch Mancos/Dakota Unit 32 #10H Well Project would be 400 ft. x 400 ft well pad that is an expansion of the existing Atencio. The proposed well expansion is located on private land (Federal Mineral) and abuts private land on the East and South sides. The expanded well will be accessed by existing roads and no new pipeline is being proposed. A 40-foot construction zone is proposed on the West, North and East sides of the proposed pad. (480ft x 440ft) No construction zone is proposed along the south edge of the pad that directly abuts a private land boundary. The approximate cuts, fills and well pad orientation is shown on the construction plats in Appendix A. Based on observations made during the pre-disturbance site visit, it has been determined that the vegetation community which best represents the proposed project area is classified as Pinyon and Juniper Woodland community.

Existing Vegetation at the well pad

Existing Vegetation Community at the road: The expanded well will be accessed by existing roads shown on the road map. Based on observations made during the pre-disturbance site visit, it has been determined that the vegetation community which best represents the proposed project area is classified as Pinyon and Juniper Woodland community.

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Based on observations made during the pre-disturbance site visit, it has been determined that the vegetation community which best represents the proposed project area is classified as Pinyon and Juniper Woodland community.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: The infrastructure proposed for this project is located on private lands managed by San Juan Resources, LLC within Section 32, Township 23N, Range 1W in Sandoval County, New Mexico. The project would include the construction, use and subsequent reclamation of one well, well pad and construction buffer zone. The Regina Ranch Mancos Dakota 32 10H would result in a total of 4.85 acres of disturbance, The proposed project area vegetation is classified as juniper woodland community. Ground cover by the dominant species estimated to be approximately 10 to 30 percent across the entire action area.

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? $\ensuremath{\mathbb{N}}$

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed type: PERENNIAL GRASS	Seed source: COMMERCIAL
Seed name: Western Wheatgrass	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 2	Proposed seeding season: AUTUMN
Seed type: OTHER	Seed source: COMMERCIAL
Seed name: Scarlet Globemallow	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 1	Proposed seeding season:
Seed type: ANNUAL GRASS	Seed source: COMMERCIAL
Seed name: Prairie Junegrass	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 2	Proposed seeding season: AUTUMN
Seed type: SHRUB	Seed source: COMMERCIAL
Seed name: Antelope Bitterbrush	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 2	Proposed seeding season: AUTUMN

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Seed type: OTHER	Seed source: COMMERCIAL
Seed name: Bottleburhs Squirretail	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 3	Proposed seeding season: AUTUMN
Seed type: PERENNIAL GRASS	Seed source: COMMERCIAL
Seed name: Indian Ricegrass	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 3	Proposed seeding season: SPRING
Seed type: ANNUAL GRASS	Seed source: COMMERCIAL
Seed name: Muttongrass	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location: OTHER,WELL PAD	
PLS pounds per acre: 2	Proposed seeding season: AUTUMN

Seed S	Summary
Seed Type	Pounds/Acre
SHRUB	2
ANNUAL GRASS	4
OTHER	4
PERENNIAL GRASS	5

Seed reclamation

First	Name:
-------	-------

Last Name:

Phone:

Email:

Total pounds/Acre: 15

Seedbed prep: San Juan Resources LLC, Reclamation Plan 4.4 Seedbed Preparation For cut and fill slopes, initial seedbed preparation will consist of pushing (dozer)/excavation (excavator)/hauling (belly scraper) the

Received by OCD: 6/24/2024 9:31:39 AM

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

unneeded fill slope material and placing it within the cut slopes. Natural rolling contours would be implemented to break up the surface and aid in removing signs of the sharp well pad corners once vegetation established. Emphasis would be placed on restoration of the existing drainage patterns and landforms to preconstruction conditions, to the extent practicable. Within areas that would be reseeded, stockpiled topsoil would be evenly redistributed prior to final seedbed preparation. Seedbed preparation within compacted areas will be ripped to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. If large clumps/clods result from the ripping process, disking would be conducted perpendicular to slopes in order to provide terracing and minimize runoff and erosion. Final seedbed preparation would consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

Seed BMP: San Juan Resources LLC, Reclamation Plan 4.2 Topsoil Replacement The upper six inches of topsoil (if available) would be stripped following vegetation mulching. Topsoil would not be mixed with the underlying subsoil horizons and would be stockpiled as a berm/windrow along the interior perimeter of the construction buffer zone. Topsoil and subsurface soils would be replaced in the proper order, prior to final seedbed preparation. Redistribution of topsoil shall not be done when the ground or topsoil is wet. Vehicle/equipment traffic would not be allowed to cross topsoil stockpiles. If topsoil is stored for a length of time such that nutrients are depleted from the topsoil, amendments would be added to the topsoil as advised by the SJR environmental scientist or appropriate agent/contractor.

Seed method: San Juan Resources LLC, Reclamation Plan 4.6 Seeding The seed mix chosen for this project is listed in Table 2. Seeding would occur at the time of interim and final reclamation. A disc-type seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the project area. SJR or its reclamation contractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Larger seeds (such as Indian ricegrass) would be planted at a depth of one to two inches, Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 0.5 inch and small seeds (such as alkali sacaton and sand drop seed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable using available equipment, the entire seed mix will be planted no deeper than 0.25 inch. A drag, packer, or roller would follow the seeder to ensure uniform seed coverage and adequate compaction. Seed would be drilled perpendicular to slopes at practical in order to minimize runoff and erosion. Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where equipment and drills can safely operate. Where drill seeding is not practicable due to topography, the reclamation contractor will hand-broadcast seed using a cyclone hand seeder or similar broadcast seeder. Seeds like Galleta (with florets) and winter fat (with fine hairs) may also be broadcast as they do not flow well through a seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground, so the seed is planted no deeper than 0.25 inch below the surface.

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment

Weed treatment plan description: San Juan Resources, LLC Reclamation Plan Section 4 (Reclamation Techniques for Successful Revegetation) Section 4.7 (Noxious and Invasive Weed Control) Should any noxious or invasive weeds be documented on any portion of the action area located on BLM-managed lands after earthwork and seeding activities, the BLM-FFO Coordinator will be notified and SJR will provide a Weed Management Plan and if necessary, a Pesticide Use Proposal. 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. SJRs weed-control contractor would contact the BLM-FFO prior to using these chemicals.

Weed treatment plan

Monitoring plan description: San Juan Resources, LLC Reclamation Plan Section 5 (Monitoring Requirements) Monitoring will be completed according to the Bureau Land Management Bare Soil Reclamation Procedure B (BLM 2013b) and Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process. 5.1 Post-Reclamation Monitoring Initiation After the well has been plugged and the reclamation work and seeding have been completed, a post-disturbance inspection at the project site will occur. The Bureau Land Management

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

representative (in collaboration with San Juan Resources, LLC) will determine site-specific monitoring locations for photo point monitoring and vegetation line point intercept transects, (if necessary). Bureau Land Management will collect GPS data on the monitoring locations, take the initial monitoring photographs, and complete the initial monitoring report within 60 days of the post-disturbance earthwork and seeding inspection. The initial report will be available from the Bureau Land Management. 5.2 Post-Reclamation Monitoring Photographs The minimum photo points necessary to document postdisturbance monitoring (including annual monitoring and long-term monitoring) are described in Table 5. Photographs will be taken with a digital camera without zoom or wide-angle adjustments. GPS coordinates for each photo point will be provided by the Bureau Land Management in the initial monitoring report and subsequently included with each photograph in the annual monitoring report. 5.3 Annual Monitoring If needed, San Juan Resources, LLC will begin annual monitoring of the photo points and the vegetation line point intercept transects 2 calendar years after the completion and approval of the final earthwork and seeding. Monitoring may occur any time of the year. A completed monitoring report of the permanent photo points will be submitted by San Juan Resources, LLC to Bureau Land Management by December 31 of the year the site is monitored. Within 60 days after receipt, the Bureau Land Management will acknowledge that the report has been received and evaluated. Vegetation line point intercept transects will be monitored annually until attainment of vegetation reclamation cover standards have been met. San Juan Resources, LLC will keep a record of the monitoring for future submittal to the Bureau Land Management at reclamation attainment.

Monitoring plan

Success standards: San Juan Resources LLC, Reclamation Plan Section 3.3 (Vegetation Reclamation Standards) Requirements for determining reclamation and if it is successfully completed for the selected vegetation community are determined by the reclamation percent cover standards for the community, as outline in Table 3. These standards must be met during post-disturbance monitoring procedures in order for the Bureau of Land Management to sign off on the attainment of vegetation reclamation standards.

Pit closure description: No reserve pit will be utilized

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD
Describe:
Surface Owner: OTHER
Other surface owner description: San Juan Resources, LLC
BIA Local Office:
BOR Local Office:
COE Local Office:
DOD Local Office:
NPS Local Office:
State Local Office:
Military Local Office:
USFWS Local Office:
Other Local Office:
USFS Region:
USFS Forest/Grassland:

USFS Ranger District:

Received by OCD: 6/24/2024 9:31:39 AM

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Section 12 - Other

Right of Way needed? N ROW Type(s): Use APD as ROW?

SUPO Additional Information:

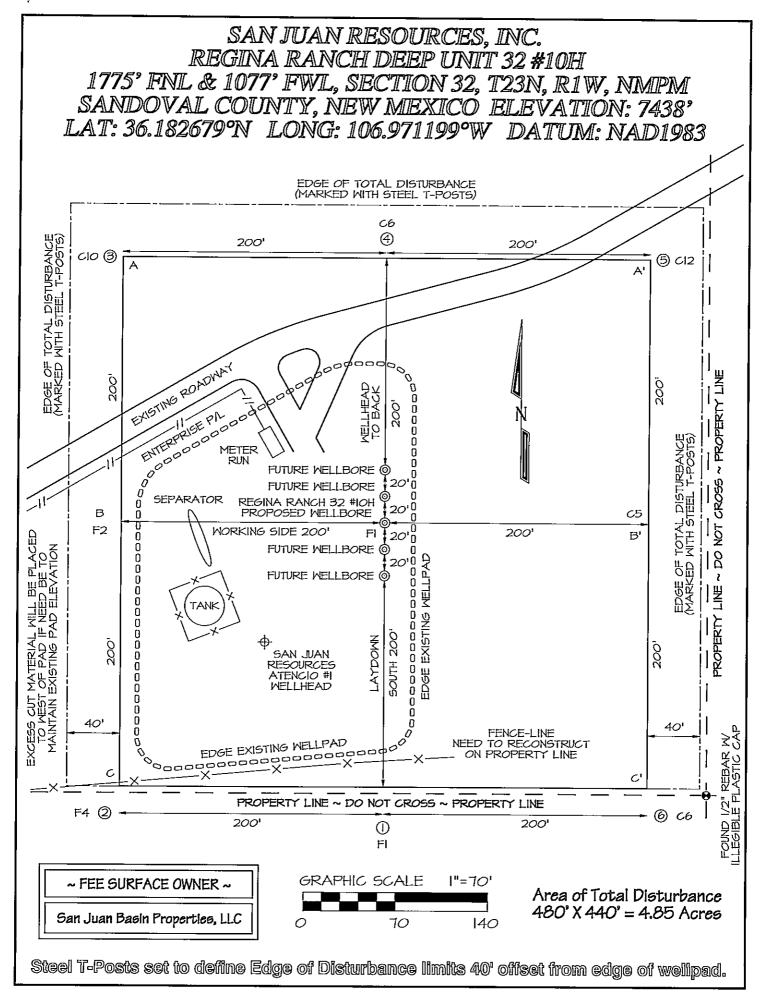
Use a previously conducted onsite? Y

ROW

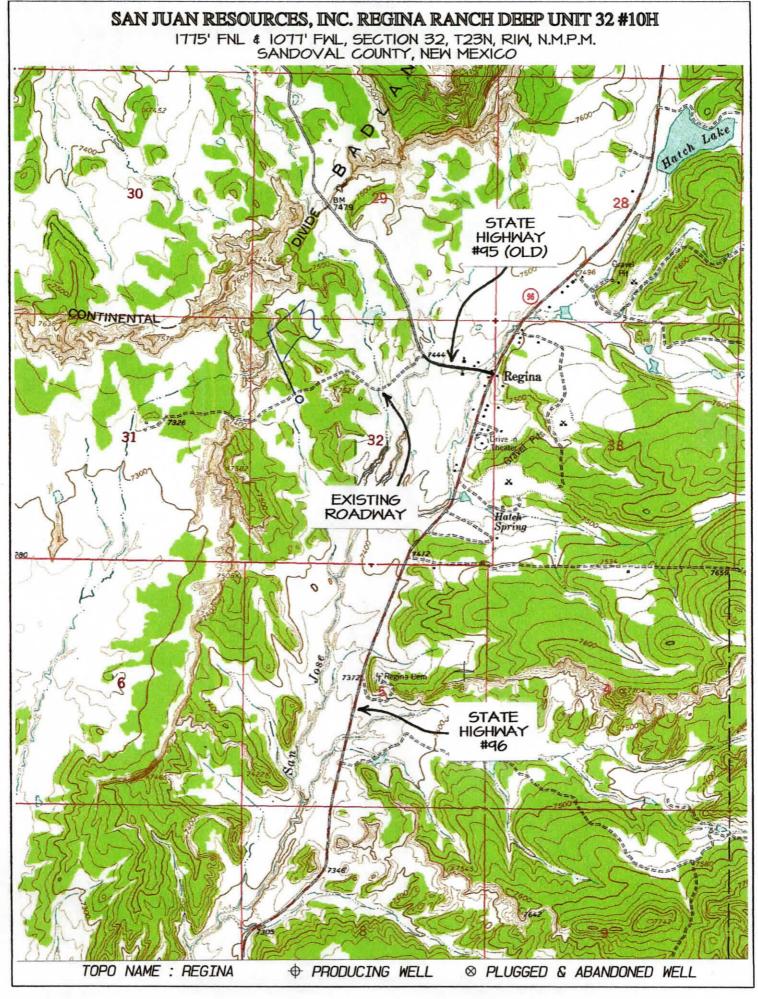
Previous Onsite information: Onsite was conducted on 6/9/2022

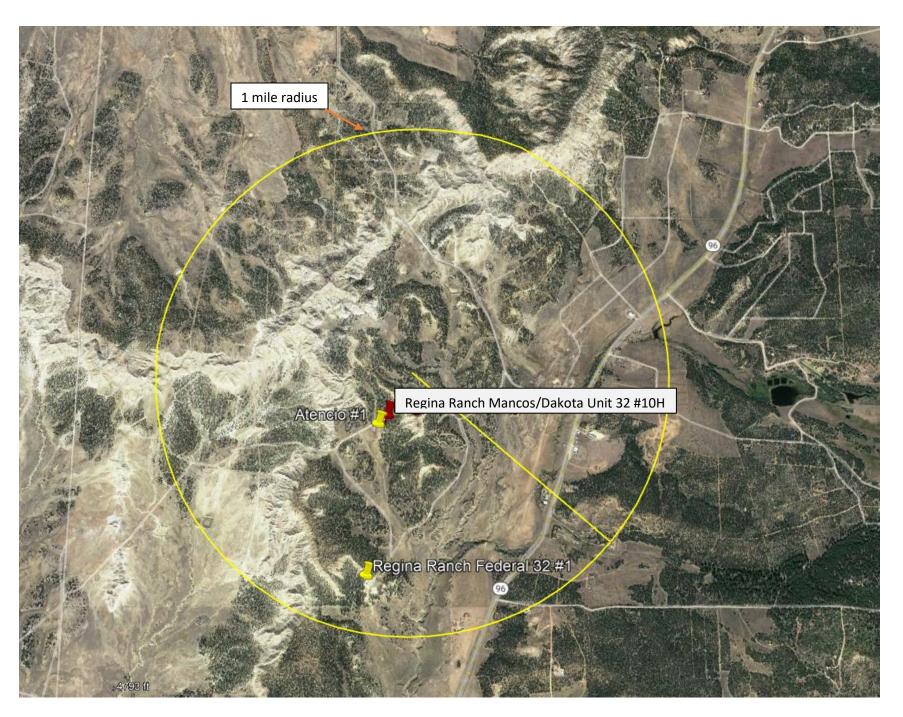
Other SUPO

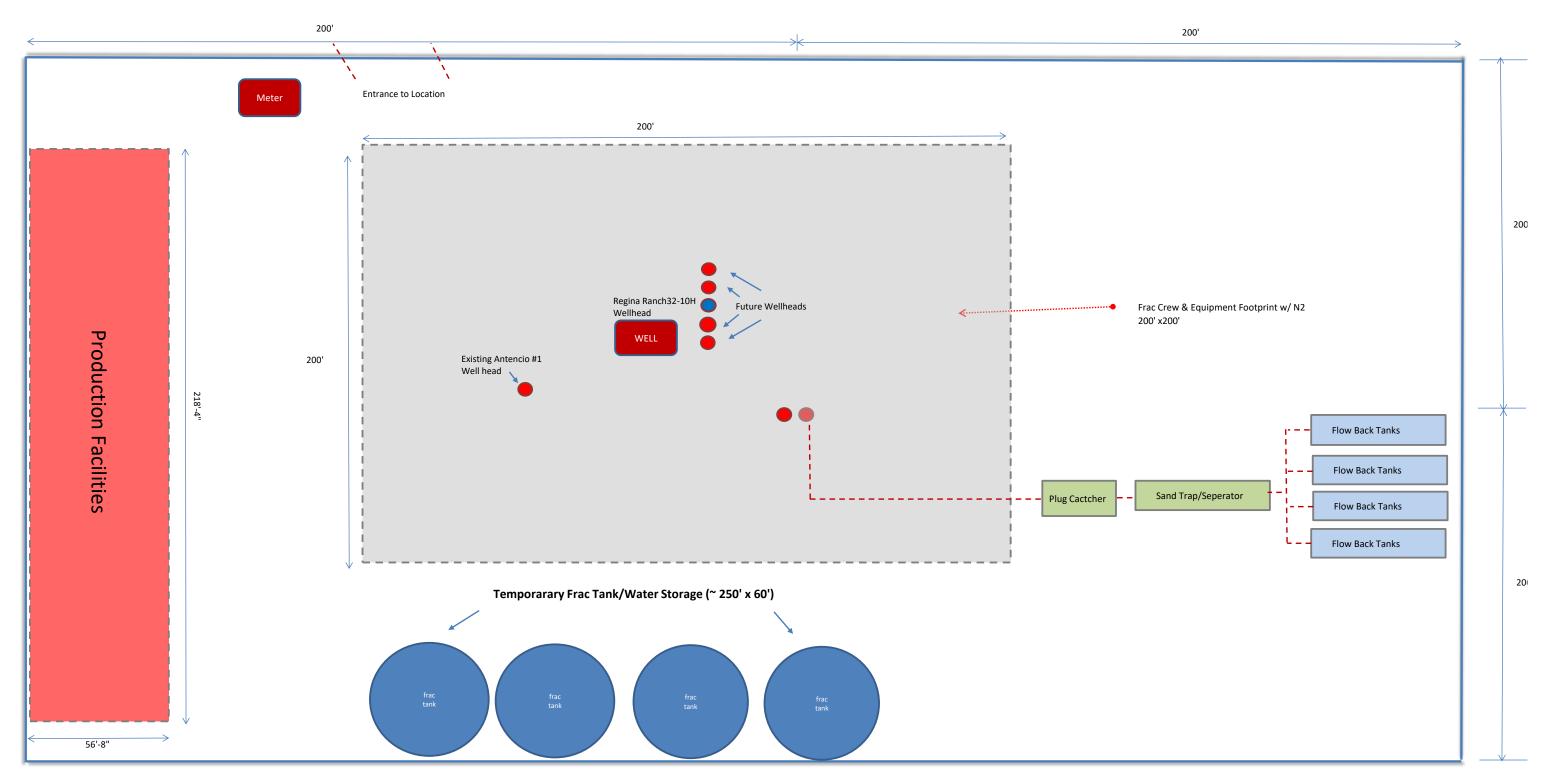
Regina_Ranch_Mancos_Dakota_Unit_32_10H_SUPO_20230203124032.pdf



Received by OCD: 6/24/2024 9:31:39 AM







WH 1

.

Water Source

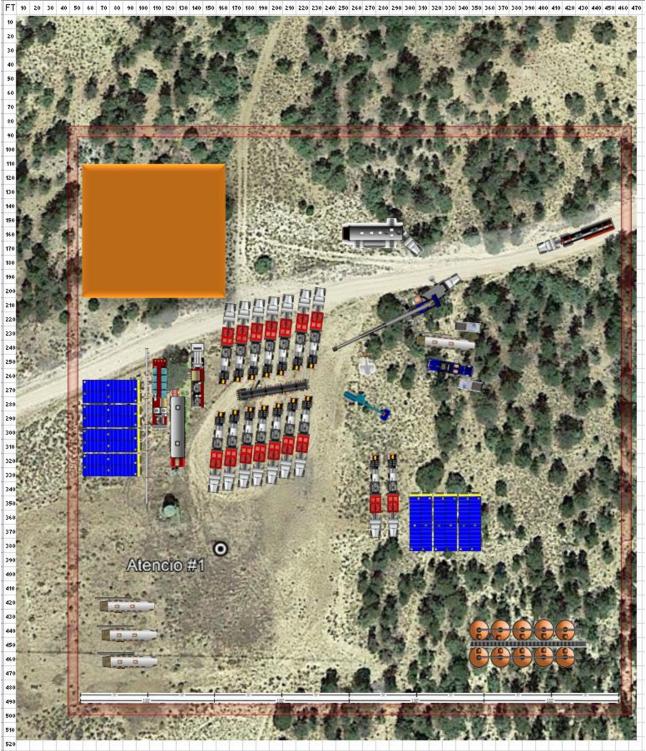
Regina Ranch Mancos Dakota Unit 32 10H



B. Drilling Layout Diagram



A. Completions Layout Diagram



FT 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470

SURFACE USE PLAN OF OPERATION

for

REGINA RANCH MANCOS/DAKOTA UNIT 32 #10H 1775' FNL & 1077' FWL Sec 32, T23N, R1W Sandoval County, New Mexico

Prepared for

San Juan Resources, Inc 1499 Blake Street, Suite 10C Denver, CO 80202

Created by



332 Rd 3100 Aztec, New Mexico 87410 Phone: (505) 327-4892

Released to Imaging: 8/19/2024 9:38:53 AM

TABLE OF CONTENTS

- 1. EXISTING ROADS
- 2. LOCATION OF EXISTING WELLS
- 3. LOCATION OF EXISTING OR PROPOSED PRODUCTION FACILITIES
- 4. LOCATIONS AND TYPES OF WATER SUPPLY
- 5. CONSTRUCTION MATERIALS
- 6. METHODS FOR HANDLING WASTE
- 7. ANCILLARY FACILITIES
- 8. WELL SITE LAYOUT
- 9. PLANS FOR SURFACE RECLAMATION
- 10. SURFACE OWNERSHIP
- **11. OTHER INFORMATION**

APPENDIX A - SURFACE RECLAMATION LAN

APPENDIX B - ROAD MAINTENANCE PLAN

APPENDIX C - SURVEY PLATS

APPENDIX D - EXISTING WELLS WITHIN 1-MILE

APPENDIX E - WATER TRANSPORTATION MAP

APPENDIX F - CONSTRUCTION MATERIALS MAP

APPENDIX G - WELL PAD LAYOUT DIAGRAMS

APPENDIX H - ACCESS ROAD MAP

Pursuant to Onshore Oil and Gas Order No. 1 (43 CFR 3160), this Surface Use Plan of Operations (SUPO) has been prepared for San Juan Resources, Inc (SJR) proposed Regina Ranch Mancos Dakota Unit 32 10H Application for Permit to Drill (APDs). This SUPO is in accordance with Onshore Oil and Gas Order No. 1, 43 Code of Federal Regulation (CFR) 2804.12 and 43 CFR 2884.11. The below information is provided to the surface management agency to give an accurate account of the proposed action for National Environmental Policy Act (NEPA) disclosure.

SJR will comply with all applicable laws, regulations, Onshore Orders, Conditions of Approvals (COA) attached to the approved APD's and this SUPO. No additional surface disturbance beyond that authorized by the approved APDs will be initiated without prior approval by the Authorized Officer (AO). SJR may utilize any of their existing well locations or water recycling facility locations as staging areas during project construction, drilling, and completion phases. Any drainage incurred to previously interim reclaimed surfaces, as a result of staging, would be promptly repaired and reclaimed following use.

1. EXISITNG ROAD

- A. Please see the existing road map and written directions from the intersection of US Hwy 550 and US Hwy 64 in Bloomfield, NM in Appendix H.
- B. For existing County Roads or roads that are considered collector roads, SJR would defer to the county or to the Roads Committee, when formed, for maintenance determinations.
- C. Existing roadways utilized would be maintained to the same or better conditions as existed prior to the commencement of operations. Roadways would be maintained to accommodate anticipated traffic volumes with all-weather access. Maintenance would continue until wells accessed by existing roadway have been Plugged and Abandoned (P&A) and a Final Abandonment Notice (FAN) has been approved.
- D. Best Management practices (BMPs) for dust abatement would be utilized along the roads to reduce fugitive dust during construction, drilling, completion, and any other heavy traffic activities during the life of the project. Water application using a rear- spraying truck or other suitable means would be primary method of dust suppression along the roads. If it is necessary to apply commercial dust mitigation materials such as magnesium chloride, organic-based compounds, or polymer,

compounds to the roads. SJR would seek approval from the appropriate surface managing agency.

- E. No routine maintenance activities would be performed during periods when the soil is too wet to adequately support construction equipment. If equipment creates ruts deeper than six inches, the soil would be deemed too wet for construction or maintenance.
- F. Existing water management and erosion control structures would be inspected and maintained to accommodate long term storm water control.
- G. Please see Appendix B for SJR's Road Maintenance Plan.
- H. During the June 09, 2022, onsite visit, it was determined by the operator and surface managing agency that SJR would upgrade and maintain the existing road from Hwy 95 to the proposed project area using Gold Book Standards.

2. LOCATION OF EXISTING WELLS

Water wells and oil and gas wells (plugged and abandoned, active, proposed) within a one-mile radius of the Regina Ranch Mancos Dakota 32 #1H Project are depicted in Appendix D. There are 0 water wells and 2 oil and gas wells (plugged and abandoned, active, proposed within a mile radius of the proposed well pad location.

3. LOCATION OF EXISTING OR PROPOSED PRODUCTION FACILITIES

Production Facilities

A. Please see Appendix G (Layout Diagrams) for a diagram depicting the anticipated production facility layout.

B. Production facilities for the Regina Ranch Mancos Dakota 32 10H would be located on the southeast side of the proposed well pad. Facilities on location may include, but are not limited to (including facilities that may occur through the life of the well), vertical and/or horizontal separators of varying types, 500 bbl. oil and water tanks, below grade tanks of varying sizes, about grade steel pit tank, vapor recovery units, vapor recovery lower, LACT building and equipment, fuel gas scrubber, chemical skids, gas lift skid, gas lift compressor, sales compressor, electric/automation buildings and equipment, capstone generators or other generator types, power poles, communication lower, combustors, cathodic protection equipment, various pumps, meter urns, pipeline risers and artificial lift equipment.

- B. Berms or containment would be constructed around all storage tanks sufficient in size to contain the volume of the single largest storage vessel plus 1-foot freeboard for precipitation: or, 110% of the volume of the largest vessel. Containment walls and floors will be impervious to fluids including hydrocarbons for 72 hours.
- C. Within 90 days of installation, all long-term production facilities associated with the Regina Ranch Mancos Dakota 32 10H Well Project would be painted "Covert Green". "Covert Green" was chosen to blend with the natural background color of the landscape as seen from a viewing distance and location typically used by the public. Contrasting safety paint and/or reflective tape will be used to highlight and mitigate a potential hazard, such as tripping hazards, pinch points, or protruding or mechanical edges that could harm the operator or public.
- D. All open-vent exhaust stacks will be modified/equipped and maintained to prevent birds or bats from entering and to discourage perching, roasting and nesting.

<u>Pipeline</u>

- A. Please see construction plans in Appendix C (Proposed Pipeline Plats) for the proposed new pipeline corridor center line survey plats identifying route, length and location, existing structures within the same corridor and/or crossed, TUAs (if any), and any other site- specific design features.
- B. SJR proposes to construct 119.7-foot pipeline system to serve the Regina Ranch Mancos Dakota Unit 32 10H Well Project. SJR would mark the exterior boundaries of the proposed pipeline corridor with stake and/or lath at 30-foot intervals prior to construction. The stakes and/or laths would be flagged in a distinctive color as determined by the holder. If applicable, the survey station numbers would be marked on the boundary stakes and /or laths at the entrance to and the exits from

private lands. The holder shall maintain all boundary stakes and/or laths in place until final cleanup and restoration is completed and approved by the BLM-FFO and the private surface owner.

- C. The proposed pipeline would be constructed and installed within 40-footwide corridor. If applicable, where parallel and adjacent to the proposed access road, the pipeline would utilize 20 feet of the proposed access as working surface and extend only an additional 20 feet beyond the access road corridor. The resulting access and pipeline would encompass a consolidated SO-foot-wide total disturbed corridor.
- D. Within the permitted corridor, trees that measure less than three inches in diameter at ground level (if present) and slash/brush would be chipped or mulched and incorporated into the topsoil as additional organic matter. All sound woody material from trees three inches in diameter or greater at ground level (if present) would be cut as low as practical to avoid waste. The mean height of any stump will not exceed one half its diameter, and in no case exceeding six inches on the uphill side. Tree trunks (left whole) and cut limbs would be stacked and made available to the private surface owner. The subsurface portion of trees (tree stumps) would be disposed of appropriately.
- E. SJR would excavate up to three trenches within the pipeline corridor offset from one another by 5 ft. using a trencher, excavator, or backhoe. The upper six-inches of topsoil would be excavated and windrowed along the trench segregated from subsoil horizons or other excavated material. Subsoil and other excavated material would be windrowed on the opposing side of the trench as the topsoil or windrowed separately on the same side depending on site conditions. The bottom of the trenches would be dug to a depth of 4 feet with a minimum trench width of sixteen inches (16"). After a pipe has been welded and coated, a side-boom tractor or excavator with pipe handling attachment would be used to place the pipe into the trenches. Each trench would consist of up to three (3) steel and/or poly gas/liquids pipelines not to exceed 12-inch in diameter. In addition, SJR may elect a 6-inch or less poly or steel water pipeline, fiber optic, and electric power line would be placed in one of the three trenches. Where applicable, the proposed pipeline would be setback five feet from existing pipelines and minimum of 15 fee (unless otherwise agreed upon) from other operators existing pipelines. If existing lines are paralleled, disturbance from the existing pipe Right of

Way would be utilized within the proposed 40-foot corridor.

F.All below grade pipelines would be buried to a depth of 4 feet. However, when applicable, pipelines would be buried in excess of four feet at road crossings, wash crossing, or existing pipeline crossings. In areas where the pipeline crosses and existing road. SJR would utilize the following backfill method. The pipeline trench would be placed side-by-side along the length of the trench across the road. The sacks would be placed with approximately 3-tó-4 inch spacing between each sack. The road base would then be backfilled and compacted to the surface. This method has been shown to provide the best road stabilization and to alleviate potholes and depressions that often occur over the trench after the backfill material settles over time. If county-maintained roads are crossed, the roadway would not be completely closed. Single land travel would be maintained via cross over ramps or cutting road for pipe installation one half at a time. Resources and other local roads crossed may be temporarily closed. Prior to cutting roadway, SJR would have the pipe welded, coated, inspected and ready to drop in upon excavation, minimizing closure time. When crossing foreign pipelines, crossing is generally under the existing line with a clearance between lines of 24-inches. Site specific circumstances such as bed rock or excessive depth of foreign line may result in crossing over or reduced clearance between lines. Where pipelines cross a drainage or wash, the pipe is deepened so top of pipe is 6 feet below the bottom of drainage or wash.

- G. Backfilling operations would be performed within a reasonable amount of time to ensure that the trenches are not left open for more than 24 hours. Soft plugs will be placed every quarter of a mile within an open trench. No more than one mile of open trench, or the amount of trench that can be worked in a day, will be opened at a time. If trench is left open overnight, it will be temporarily fenced, or a night watchman will be utilized. The excavated soil would be returned to the trenches, atop the pipe, and compacted to prevent subsidence. The trenches would be compacted approximately 2 feet of fill is placed over the pipe and after the ground surface has been leveled. A crown would be constructed over the tops of the trench to allow for settling. Trenches will be maintained to correct settlement and prevent erosion.
- H. Where appropriate and applicable, earthen berms would be constructed within the pipeline corridor where it intersects existing roadways. The berms would be a minimum of 4 feet high with a 1-foot cut at the base

facing towards the direction of potential traffic to discourage unauthorized cross-country travel on the cleared corridor.

- I. Approximately 10-20 pipeline construction personnel will be onsite during construction. Approximately 5 -10 standard size oilfield pickups will be used to transport construction personnel and 5 transport truck loads to deliver equipment to location. Workers will be on-site 10 hours a day, 7 days a week, for the duration of construction. The majority of the workers will commute to the job early in the morning (between 6:00 a.m. and 7:00 a.m.) and will leave in the evening (between 5:30 p.m. and 6:30 p.m.). Heavy equipment will be transported to the site and left within the permitted area until construction is complete, unless other agreements are made with the surface owner.
- J. Following construction, carsonite pipeline markers would be installed along the pipeline corridor within the line of sight. These markers would not create safety hazards.
- K. Prior to the well-connected pipelines being placed in service, the lines would be hydrostatic tested. Water from testing would be purged from the lines directly to water trucks or vessels at an existing facility. Water would be disposed of at an approved saltwater disposal or reused by SJR.during active drilling and completion operations.
- L. Prior to the steel lines being placed in service, cathodic protection would be installed. Cathodic protection in an integral part of maintaining the integrity of pipelines, wellbores, and other sub-grade metallic structures. It is accomplished through the use of sacrificial anode beds. Anode beds consist of a sacrificial metal (anode), a rectifier, and cabling. The sacrificial metal is a more easily corroded metal. The purpose of the sacrificial anode beds is to provide the necessary material for the anodic process of cathodic protection. The rectifier and cabling provide the electrical current required to effectively protect the sub-grade structure (cathodic). Cathodic protection facilities would remain in place for the life of the proposed pipelines. Upon final reclamation of the pipeline, the decommissioning of the anode bed would be completed in accordance with all State, Federal, local regulatory requirements, and surface owner.
- M. Above ground appurtenances associated with the proposed pipelines may include, but are not limited to, pigging stations, future well tie-in risers, valve cans, Coriolis check meters/meter skids/meter house, automation

equipment, BGT(s}, crossover valve set, and protective barricade structures if necessary.

- N. Within 90 days of installation, all above ground appurtenances associated with the permanent buried steel pipelines would be painted "Covert Green". Contrasting safety paint and or/reflective tape will be used to highlight and mitigate a potential hazard, such as a tripping hazards, pinch points, protruding or mechanical edges that could harm the operator or public, and pipe barricades to highlight visibility from roadway.
- O. In addition to buried pipelines, SJR may lay up to two (2) parallel 12-inch inside diameter or less lay flat hoses or high-density polyethylene (HDPE) pipelines within the proposed pipeline corridor and other existing road and pipeline corridors to serve drilling and completion operations. These surface pipelines would be temporary for the duration of active drilling and completions operation in the surrounding area and movement of water between recycling facilities as needed. These pipelines would transport fresh water, flowback water, and produced water. Where surface lines cross roadways, dual 18-inch or 24-inch culverts would be installed within the roadway and used as casing for the pipelines. Prior to breaking down and picking up surface lines they would be recovered in a facility, recycling containment, or water hauler for reuse or disposal.
- P. Final reclamation of the proposed pipeline corridor is discussed in the Surface Use Plan (Appendix B)
- Q. The proposed pipeline will not cross any existing fence lines.

4. LOCATION AND TYPES OF WATER SUPPLY

Please see Appendix E for the water transportation map for the below listed sources.

During construction, fresh water sources will be used to dampen the native soils as fill slopes are constructed in lifts. This will promote acceptable compaction for the access road and expanded well pad, as well as control fugitive dust. SJR anticipates use of approximately 1,500 bbls of fresh water to construct well site.

Additionally, fresh water is used on an as needed basis for dust suppression along

dirt roadways during drilling, completion, and any other operations where heavy traffic would be anticipated. The total amount applied during these activities is all dependent upon, but not limited to, length of dirt road, weather conditions, relative humidity, density and duration of traffic. The estimates are general and assumed using average past volumes on similar activities.

During the initial drilling, and post completion drill out operations, SJR will use a consolidated 3,000 bbls per well. Hole conditions while drilling will dictate the actual volumes used.

Fresh water would be obtained from the following locations.

Smelser Water Hole (RG-68550-POD1 - POD2)

The Smelser Water hole is located in the northwest ¼ of the northwest ¼ in section 9, Township 21 North, Range 7 West. The documented POD is located at Latitude -107.046578, Longitude 36.070526. Transportation from source will be via temporary surface lay flat lines and or trucking.

Community Water COOP (SJ 02259)

SJ 02259 is located in Section 16, Township 24 North, Range 2 West, NMPM. The documented POD is located at Latitude 36.311670° North and Longitude -107.047230°. This source is located on public lands managed by the BLM-FFO. Transportation from source will be via temporary surface lay flat lines and or trucking.

During completion SJR would use non-potable water from a non-potable water bearing formation. SJR may also utilize produced water gathered from existing wells in the immediate area. SJR may also utilize fresh water trucked from wells/pond listed above. Flowback water from completions operations would be recycled for re-use. The non-potable sources would be gathered, stored, treated, and filtered at on-site water facilities.

5. CONSTRUCTION MATERIALS

All surface infrastructure would be constructed utilizing native borrow within the permitted area to create a balanced working surface. Surfacing material of fill material, such as sandstone, gravel, pit run, or road base would be used if needed and economically viable and would be obtained from an approved location. SJR will maximize the use of native material within the proposed project area to reduce or eliminate the need to haul in foreign materials.

Material may be imported and used for any of the following reasons; low water

crossings (pit run and road base), road surfacing (road base, gravel or sandstone), erosion control (riprap cobble stone), barricades (boulders), under and surrounding equipment (gravel), and filling soft or muddy areas (sandstone, pit run, road base or gravel)

A map of borrow pit location where SJR may obtain material can be found in Appendix F. The borrow pits are labeled with operating company name if applicable and legal location to the quarter-quarter.

6. METHODS FOR HANDLING WASTE

- A. Cuttings
 - Drilling operations would utilize a closed-loop system. Drilling of the horizontal laterals would be accomplished with water-based mud. Oil based mud could be used contingent on formation properties encountered. All cuttings would be placed in roll-off bins and hauled to a commercial disposal facility or land farm. SJR would follow Onshore Oil and Gas Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit would be used.

• Closed-loop tanks would be adequately sized for containment of all fluids.

B. Drilling Fluids

• Drilling fluids would be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids would be recycled and transferred to other permitted closed-loop systems or disposed of at one of the locations specified below in part H.

C. Spills

• Any spills of non-freshwater fluids would be immediately cleaned up and removed to an approved disposal site.

D. Sewage

• Portable toilets would be provided and maintained as needed during construction.

E. Garbage and other waste material

 All garbage and trash would be placed in enclosed metal trash containers. The trash and garbage would be hauled off site and dumped in an approved landfill, as needed. F. Hazardous Waste

- No chemicals subject to reporting under Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000
- pounds would be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of these wells.
- No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities would be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of these wells.
- All fluids (i.e., scrubber cleaners) used during washing of production equipment would be properly disposed of to avoid ground contamination or hazard to livestock or wildlife.

G. Flowback:

- Flowback transported off location will consist of approximately 2500 bbls of produced water per day for approximately 30 days.
- Flowback fluid would be gathered, recycled, and reused as described in Section 5. If there are no foreseen drilling and completion operations, flowback would be disposed of at one of the disposal wells listed below.

H. Produced Water:

SJR would dispose of produced water at the following facilities:

- Disposal 001, API 30-045-26862, operated by Basin Disposal Inc., located in the Southeast¼ of the Northwest¼, Section 3, Township 29 North, Range 11 West.
- Sunco Disposal 001, API 30-045-28653, operated by Agua Moss, LLC, located in the Southwest¼ of the Northwest¼, Section 2, Township 29 North, Range 12 West.
- TNT SWD, API 30-039-31257, operated by T-N-T Environmental, Inc. located in Section 8, Township 25N, Range 3 West.

2. Produced water would be hauled by truck and/or transported through below grade or surface pipeline infrastructure to any of SJR's potential water recycling facilities. Produced water may be gathered and used in future drilling and completion operations as an alternative disposal method.

7. ANCILLARY FACILITIES

There will be no airstrip or camp. Camping trailers will be on location for drilling and completions personnel.

8. WELL SITE LAYOUT

Topsoil removal, storage, and protection is described in detail in the Surface Reclamation Plan (Appendix A). During construction, the proposed well pad would be leveled to provide adequate space and a level working surface for vehicles and equipment. Excavated materials from cuts would be used on fill portions of the well pad to level the surface. The approximate cuts, fills, and well pad orientation is shown on the cut/fill worksheet and cross section diagrams in the survey plats found in Appendix C. Additionally, please see Appendix G for the proposed Well Pad Facility Diagram showing long term well pad layout, reclamation areas, and disturbance acreage; Well Pad Drilling Diagrams showing the location and orientation of the drill rig; and the Well Pad Completion Diagram, showing the location and orientation of the completion equipment.

Drilling of the proposed well would require an expansion of 400-foot by 400-foot well pad (4.85 acres). A 40-foot construction zone is proposed on the west, north and east sides of the proposed pad. This entire area would be utilized during construction, setting of production equipment, drilling and completion phases.

9. PLANS FOR SURFACE RECLAMATION

A Surface Reclamation Plan for the Regina Ranch Mancos Dakota 32 10H Well Project is attached hereto as Appendix A. This Surface Reclamation Plan was prepared in accordance with Onshore Oil and Gas Order No, 1 and input from the surface owner.

The Surface Reclamation plan addresses:

- Configuration of the reshaped topography;
- Drainage systems;
- Segregation of spoil material;
- Surface disturbances;
- Backfill requirements;
- Redistribution of topsoil;
- Soil treatments;

- Seeding or other steps to reestablish vegetation;
- Weed control;
- and practices necessary to reclaim all disturbed areas.

10. SURFACE OWNERSHIP

The project is location on:

San Juan Resources 1499 Blake Street, Ste 10C Denver, Colorado 80202 (303) 573-6333

11. OTHER INFORMATION

- SJR's appointed construction contractors would call New Mexico One-Call (or equivalent) to identify the location of any marked or unmarked pipelines or cables located in proximity to the proposed Regina Ranch Mancos Dakota 32 10H Well Project or any other areas proposed to have ground disturbance at least two working days prior to ground disturbance.
- The construction phase of the project would commence upon receipt of an approved APD. The BLM-FFO would be notified via phone or email at least 48 hours prior to the start of construction activities associated with the project.
- All activities associated with the construction, use/operation, maintenance, and abandonment or termination of the Regina Ranch Mancos Dakota 32 10H Well Project would be limited to areas approved in the APDs.
- The project area has been surveyed by the Division of Conservation Archaeology. The cultural survey report will be submitted directly to the surface managing agencies. Cultural mitigation, monitoring, and implementation of site protection barriers would occur if stipulated in the COAs attached to the approved APDs.
- Construction and maintenance activities would cease if soil or road surfaces become saturated to the extent that construction equipment is unable to stay within the project area and/or when activities cause irreparable harm to roads, soils, or streams.
- All BLM-FFO general COAs would apply to this action.

Received by OCD: 6/24/2024 9:31:39 AM

RECLAMATION PLAN

for

REGINA RANCH MANCOS/DAKOTA UNIT 32 #10H 1775' FNL & 1077' FWL Sec 32, T23N, R1W Sandoval County, New Mexico

Prepared for

San Juan Resources, Inc 1499 Blake Street, Suite 10C Denver, CO 80202

Created by



332 Rd 3100 Aztec, New Mexico 87410 Phone: (505) 327-4892

.

TABLE OF CONTENTS

1. INTRODUCTION
2. PROJECT DESCRIPTION
2.1 Estimated Total Area of Disturbance5
2.2 Well Pad5
2.3 Access Road5
3. PRE-DISTRUBANCE SITE VISIT
3.1 Vegetation Community5
3.2 Proposed Reclamation Seed Mix6
3.3 Vegetation Reclamation Standards7
3.4 Weed Survey7
3.5 Soil Evaluation7
3.6 Pre-Disturbance Site Photographs7
4. RECLAMATION TECHNIQUES FOR SUCCESSFUL REVEGETATION
4.1 Vegetation and Site Clearing8
4.1 Vegetation and Site Clearing
4.2 Topsoil Replacement
4.2 Topsoil Replacement.84.3 Water Management/Erosion Control Features.84.4 Seedbed Preparation.94.5 Soil Amendments.94.6 Seeding.94.7 Noxious and Invasive Weed Control.10
4.2 Topsoil Replacement
4.2 Topsoil Replacement. 8 4.3 Water Management/Erosion Control Features. 8 4.4 Seedbed Preparation. 9 4.5 Soil Amendments. 9 4.6 Seeding. 9 4.7 Noxious and Invasive Weed Control. 10 4.8 Revegetation Success for Final Abandonment. 10 5. MONITORING REQUIREMENTS. 11
4.2 Topsoil Replacement

- ----

- ---

•

LIST OF TABLES

•

Table 1. Pre-Disturbance Onsite Visit Attendees	. 4
Table 2. BLM Farmington Field Office Pinyon Juniper Community Seed Mix	5
Table 3. Reclamation Goal for Sagebrush Community	6
Table 4. List of Pre-Disturbance Site Photographs	7

_

· _ _ _

Applicant	San Juan Resources, Inc
Project Type	Reclamation of a natural gas well site.
Well, Oil and Gas Lease, or Right-of-Way (ROW)	Regina Ranch Mancos/Dakota Unit 32 #10H
Name	- ·
Legal Location	Section 32 (1775' FNL, 1077' FWL), Township 23 North, Range 1 West, New Mexico Principal Meridian, in Sandoval, New Mexico
Lease Number(s)	NMNM-128373

1. INTRODUCTION

San Juan Resources, LLC (SJR) is providing this Revegetation Plan to the Bureau of Land Management – Farmington Field Office (BLM-FFO) for the Regina Ranch Deep Unit 32 #10H. During interim and final reclamation, San Juan Resources, LLC will meet the reclamation standards provided in this plan to re-establish vegetation and control noxious weeds and erosion. This reclamation plan has been prepared to meet the requirements and guidelines of the Bureau of Land Management (BLM) Farmington Field Office (FFO) Bare Soil Reclamation Procedures (BLM 2013a) and Onshore Oil and Gas Order No. 1. Enduring will be responsible for all surface disturbance authorized by the approved APDs until the permits are transferred or they obtain a Final Abandonment Notice (FAN) or relinquishment from the BLM-FFO.

San Juan Resources, LLC, may submit a request to the BLM/FFO to revise the Reclamation Plan at any time during the life of the project in accordance to page 44 of the Gold Book (USDI-USDA 2007). San Juan Resources, LLC will include justification for the revision request.

San Juan Resources, LLC contact person for this Reclamation Plan is: Arleen Smith, Regulatory Manager Walsh Engineering 332 Rd 3100 Aztec, NM 87410 Phone:(505) 327-4892

2. PROJECT DESCRIPTION

Infrastructure proposed to be constructed, operated, subsequently interim reclaimed, and eventually fully reclaimed as part of the Regina Ranch Mancos/Dakota Unit 32 #10H includes one well pad with production facilities and construction buffer zone, one well pad access road, pipeline corridor including temporary drilling and completion surface lines, and three temporary use areas (TUAs). The proposed project is located on private land (Federal Minerals), ~ 93 miles South of Bloomfield, NM.

2.1 Estimated Total Area of Disturbance

The Regina Ranch Mancos Dakota Unit 32 #10H well pad measures 400 feet by 400 feet, with a 40 foot construction zone proposed on the west, north and east sides (480 ft x 440 ft) Total Area of disturbance of 4.85 acres would be reclaimed with Pinyon Juniper seed mix.

2.2 Well Pad

The proposed Regina Ranch MancosDakota Unit 32 #10H Well Project would be 400 ft. x 400 ft well pad that is an expansion of the existing Atencio. The proposed well expansion is located on private land (Federal Mineral) and abuts private land on the East and South sides. The expanded well will be accessed by existing roads and no new pipeline is being proposed. A 40-foot construction zone is proposed on the West, North and East sides of the proposed pad. (480ft x 440ft) No construction zone is proposed along the south edge of the pad that directly abuts a private land boundary. The approximate cuts, fills and well pad orientation is shown on the construction plats in Appendix A.

2.3 Access Road

The expanded well will be accessed by existing roads shown on the road map in Appendix B.

3. PRE-DISTRUBANCE SITE VISIT

The pre-disturbance site visit occurred on June 09, 2022. The following people were present at the site visit (Table 1).

Name	Affiliation
Arleen Smith	Walsh Engineering
John Thompson	Walsh Engineering
Jaime DeMarco	BLM

Table 1. Pre-Disturbance Onsite Visit Attendees

3.1 Vegetation Community

Based on observations made during the pre-disturbance site visit, it has been determined that the vegetation community which best represents the proposed project area is classified as Pinyon and Juniper Woodland community.

3.2 Proposed Reclamation Seed Mix

Disturbance will be re-contoured, and topsoil will be redistributed and prepared for seeding by the construction contractor. Ripping, disking, and seeding of the site will be

3.2 Proposed Reclamation Seed Mix

Disturbance will be re-contoured, and topsoil will be redistributed and prepared for seeding by the construction contractor. Ripping, disking, and seeding of the site will be done by SJR's construction contractor using the BLM-approved seed mix shown which is shown in Table 2. The proposed reclamation seed mix takes into account the existing vegetation on the proposed project site.

Table 2. BLM Farmington Field Office Pinyon Juniper Community Seed Mix

Pinyon-juniper community menu based seed mix by habitat type for reclamation (minimum requirement) **

Common Name	Scientific Names	Variety	Season	Form	PLS Ibs/acre*		
	Plant one of	of the followin	g:				
Mountain mahogany	Cercocarpus montanus	VNS	Warm	Shrub	2.0		
Antelope bitterbrush	<mark>Purshia tridentata</mark>	VNS	Cool	<mark>Shrub</mark>	<mark>2.0</mark>		
and two of the following:							
Western wheatgrass	Pascopyrum smithii	Arriba	Cool	Sod	<mark>2.0</mark>		
Bottlebrush squirreltail	Elymus elymoides	Tusas or VNS	Cool	Bunch	3.0		
Needleandthread	Hesperostipa comata	VNS	Cool	Bunch	3.0		
	and three of	the following:					
Indian ricegrass	Achnatherum hymenoides	Paloma or Rimrock	Warm	Bunch	<mark>3.5</mark>		
Blue grama	Bouteloua gracilis	Alma or Hachita	Warm	Bunch	2.0		
Sand dropseed	Sporobolus cryptandrus	VNS	Warm	Bunch	0.5		
Prairie Junegrass	Koeleria macrantha	VNS	Cool	Bunch	2.0		
Muttongrass	Poa fendleriana	VNS	Cool	Bunch	2.0		
and one of the following:							
Scarlet globemallow	Sphaeralcea coccinea	VNS	Warm	Forb	0.25		
Utah sweetvetch	Hedysarum boreale	VNS	Warm	Forb	0.25		

**Based on 60 pure live seeds (PLS) per square foot, drill seeded. Double this rate (120 PLS per square foot) if broadcast or hydroseeded.

3.3 Vegetation Reclamation Standards

Requirements for determining reclamation and if it is successfully completed for the selected vegetation community are determined by the reclamation percent cover standards for the community, as outline in Table 3. These standards must be met during post-disturbance monitoring procedures in order for the Bureau of Land Management to sign off on the attainment of vegetation reclamation standards.

Functional Group	Pèrcent (%) Foliar Cover	Common Speciës
Trees/Shrubs/Grasses/For bs	<u>></u> 35	Utah juniper, Pinyon pine; big sagebrush, four-wing saltbrush, Antelope bitterbrush, alkali sacaton, western wheatgrass, Indian ricegrass, galleta, sand dropseed, scarlet globmallow, wooly Indianwheat, fleabane, Penstemon spp., buckwheat, threadleaf groundsel
Invasive/undesirables 10% allowed toward meeting standard of 35%.	≤10	Plants that have the potential to become a dominant species on a site where its presence is a detriment to revegetation efforts or the native plant

3.4 Weed Survey

During the onsite visit, the proposed action area was surveyed for noxious weeds listed on the New Mexico Department of Agriculture's Class A and Class B list. During the survey, no noxious weeds were found. Russian thistle was observed in the project area and sporadically mixed in the surrounding habitat.

3.5 Soil Evaluation

The BLM-FFO representative and SJR representative collaboratively decided at the pre-disturbance site visit that no soil testing is necessary for the proposed project area.

3.6 Pre-Disturbance Site Photographs

Photographs were not taken of the pre-disturbance site. Each photograph in this Surface Reclamation Plan is annotated with the location of the photo point and the direction the photograph was taken. The photographs and locations are listed in Table 4 below.

Photographs	Location Description
·	

Table 4. List of Pre-Disturbance Site Photographs

4. Reclamation Techniques for Successful Revegetation

All activities associated with the construction, use/operation, maintenance, and abandonment or termination of Regina Ranch Deep Unit 32 #10H Well Project would be limited to areas approved in the APD's.

4.1 Vegetation and Site Clearing

Vegetation removed during construction, including trees (if applicable) that measure less than three inches in diameter (at ground level) and slash/brush, would be chipped or mulched and incorporated into the topsoil as additional organic matter. If trees are present, all trees three inches in diameter or greater (at ground level) would be cut to ground level and delimbed. Tree trunks (left whole) and cut limbs would be stacked and made available to the public. The subsurface portion of trees (tree stumps) would be disposed of appropriately.

4.2 Topsoil Replacement

The upper six inches of topsoil (if available) would be stripped following vegetation mulching. Topsoil would not be mixed with the underlying subsoil horizons and would be stockpiled as a berm/windrow along the interior perimeter of the construction buffer zone. Topsoil and sub-surface soils would be replaced in the proper order, prior to final seedbed preparation. Redistribution of topsoil shall not be done when the ground or topsoil is wet. Vehicle/equipment traffic would not be allowed to cross topsoil stockpiles. If topsoil is stored for a length of time such that nutrients are depleted from the topsoil, amendments would be added to the topsoil as advised by the SJR environmental scientist or appropriate agent/contractor.

4.3 Water Management/Erosion Control Features

The BLM representative and the SJR representative would work in collaboration to develop site-specific erosion control or water management features and to identify installation locations. Potential erosion control or water management features that may be used include (but are not limited to) water bars or rolling dips for roads, sediment basins or sediment traps, check dams, silt fencing, bellholes upstream of culverts, outlet protection for culverts, erosion control blankets, straw bales, and straw wattles.

- A culvert would be installed at the intersection with the existing roadway to allow for sufficient drainage within the disturbance.
- A minimum of one (1) 24-inch culvert would be placed at the topographically low area that intersects the new access road. Additional culverts would be added every 200 feet or as needed.

During interim reclamation, areas of the project that are not needed for long term well operations and maintenance will be recontoured to re-establish disturbed terrain and blend into the surrounding landscape. The natural drainage network would be re-established as practicable with necessary diversions and silt traps around the long-term project footprint.

4.4 Seedbed Preparation

For cut and fill slopes, initial seedbed preparation will consist of pushing (dozer)/excavation (excavator)/hauling (belly scraper) the unneeded fill slope material and placing it within the cut slopes. Natural rolling contours would be implemented to break up the surface and aid in removing signs of the sharp well pad corners once vegetation established. Emphasis would be placed on restoration of the existing drainage patterns and landforms to preconstruction conditions, to the extent practicable.

Within areas that would be reseeded, stockpiled topsoil would be evenly redistributed prior to final seedbed preparation. Seedbed preparation within compacted areas will be ripped to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. If large clumps/clods result from the ripping process, disking would be conducted perpendicular to slopes in order to provide terracing and minimize runoff and erosion. Final seedbed preparation would consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

4.5 Soil Amendments

Soil amendments would be added to the topsoil, if needed, as advised by the SJR environmental scientist or appropriate surface managing agency.

4.6 Seeding

The seed mix chosen for this project is listed in Table 2. Seeding would occur at the time of interim and final reclamation.

A disc-type seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the project area. SJR or its reclamation contractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Larger seeds (such as Indian ricegrass) would be

planted at a depth of one to two inches, Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 0.5 inch and small seeds (such as alkali sacaton and sand drop seed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable using available equipment, the entire seed mix will be planted no deeper than 0.25 inch. A drag, packer, or roller would follow the seeder to ensure uniform seed coverage and adequate compaction. Seed would be drilled perpendicular to slopes at practical in order to minimize runoff and erosion.

Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where equipment and drills can safely operate. Where drill seeding is not practicable due to topography, the reclamation contractor will hand-broadcast seed using a "cyclone" hand seeder or similar broadcast seeder. Seeds like Galleta (with florets) and winter fat (with fine hairs) may also be broadcast as they do not flow well through a seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground, so the seed is planted no deeper than 0.25 inch below the surface.

4.7 Noxious and Invasive Weed Control

Should any noxious or invasive weeds be documented on any portion of the action area located on BLM-managed lands after earthwork and seeding activities, the BLM-FFO Coordinator will be notified and SJR will provide a Weed Management Plan and if necessary, a Pesticide Use Proposal. 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. SJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals.

4.8 Revegetation Success for Final Abandonment

In order to reach a final abandonment status for disturbance and reclamation on BLMmanages lands, reclamation efforts much reach a uniform vegetative cover of native plant species. Requirements for determining reclamation and its successful completion of the selected vegetation community on BLM lands is determined by the reclamation percent cover standards for the community, as outlined previously in Table 3. These standards must be met on BLM managed lands during postdisturbance monitoring procedures in order for the BLM-FFO to sign off on the attainment of vegetation reclamation standards.

Revegetation percent cover standards will be attained, documented, and submitted to the BLM-FFO by SJR or an exception granted before the BLM-FFO will approve a final abandonment notice (FAN) or relinquishment.

5. Monitoring Requirements

Monitoring will be completed according to the Bureau Land Management Bare Soil Reclamation Procedure B (BLM 2013b) and Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process.

5.1 Post-Reclamation Monitoring Initiation

After the well has been plugged and the reclamation work and seeding have been completed, a post-disturbance inspection at the project site will occur. The Bureau Land Management representative (in collaboration with San Juan Resources, LLC) will determine site-specific monitoring locations for photo point monitoring and vegetation line point intercept transects, (if necessary). Bureau Land Management will collect GPS data on the monitoring locations, take the initial monitoring photographs, and complete the initial monitoring report within 60 days of the post-disturbance earthwork and seeding inspection. The initial report will be available from the Bureau Land Management.

5.2 Post-Reclamation Monitoring Photographs

The minimum photo points necessary to document post-disturbance monitoring (including annual monitoring and long-term monitoring) are described in Table 5. Photographs will be taken with a digital camera without zoom or wide-angle adjustments. GPS coordinates for each photo point will be provided by the Bureau Land Management in the initial monitoring report and subsequently included with each photograph in the annual monitoring report.

Photo Point	Photograph	Location
		· · · · · · · · · · · · · · · · · · ·
	<u></u>	

Table 5. List of Minimum Required Post-Disturbance Monitoring Photographs

5.3 Annual Monitoring

If needed, San Juan Resources, LLC will begin annual monitoring of the photo points and the vegetation line point intercept transects 2 calendar years after the completion and approval of the final earthwork and seeding. Monitoring may occur any time of the year. A completed monitoring report of the permanent photo points will be submitted by San Juan Resources, LLC to Bureau Land Management by December 31 of the year the site is monitored. Within 60 days after receipt, the Bureau Land Management will acknowledge that the report has been received and evaluated. Vegetation line point intercept transects will be monitored annually until attainment of vegetation reclamation cover standards have been met. San Juan Resources, LLC will keep a record of the monitoring for future submittal to the Bureau Land Management at reclamation attainment.

6. References

43 CFR Part 3160, "Onshore Oil and Gas Order No. 1; Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Approval of Operations," 72 Federal Register 44 (March 2007), pp.10328- 10338.

U.S. Department of the Interior – U.S Department of Agriculture (USDI-USDA). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST- 06/021+307/REV 07. Bureau of Land Management. Denver, Colorado. 84 pp.

Received by OCD: 6/24/2024 9:31:39 AM

Page 116 of 139

ROAD MAINTENANCE PLAN

for

REGINA RANCH MANCOS/DAKOTA UNIT 32 #10H 1775' FNL & 1077' FWL Sec 32, T23N, R1W Sandoval County, New Mexico

Prepared for

San Juan Resources, Inc 1499 Blake Street, Suite 10C Denver, CO 80202

Created by



332 Rd 3100 Aztec, New Mexico 87410 Phone: (505) 327-4892

1. INTRODUCTION

San Juan Resources, Inc is providing this Road Maintenance Plan (Plan) to the Bureau of Land Management Farmington Field Office (BLM-FFO) as part of the Surface Use Plan of Operation (SUPO) for the Regina Ranch Mancos Dakota Unit 32 #10H. The road addressed in the Plan was permitted under the Applications for Permit to Drill (APO) for the well is accessed by the existing roads shown on the road map.

The road maintenance procedures provided in this Plan meet the standards established in the Gold Book: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development and BLM Manual 9113. Per the Regina Ranch Mancos Dakota Unit 32 #10H Well Project APD, San Juan Resources, Inc will be responsible for road maintenance with well. The responsibility will continue until San Juan Resources, Inc transfers the permit or abandons the project and obtains a Final Abandonment Notice of relinquishment from the BLM-FFO. Refer to the SUPO or Conditions of Approval (COAs) attached to the approved APO for any upgrades to existing roads.

2. ROAD INSPECTIONS

San Juan Resources, Inc Representatives will formally inspect the road biannually, in the spring and fall, to assess the condition of the road. The formal road inspection will be recorded on a Road Inspection Form (blank form attached to this Plan). Completed Road Inspection Forms will be kept on file at San Juan Resources, Inc and can be provided to the BLM-FFO, if requested.

Additionally, outside of the formal inspection period, San Juan Resources, Inc Representatives driving to/from the project area **will** assess the condition of the road and notify the San Juan Resources, Inc Construction Supervisor if maintenance is needed.

Road maintenance activities will be documented at San Juan Resources and can be provided to the BLM-FFO, if requested.

3. ROAD MAINTENANCE

The following maintenance may be performed on an as needed basis:

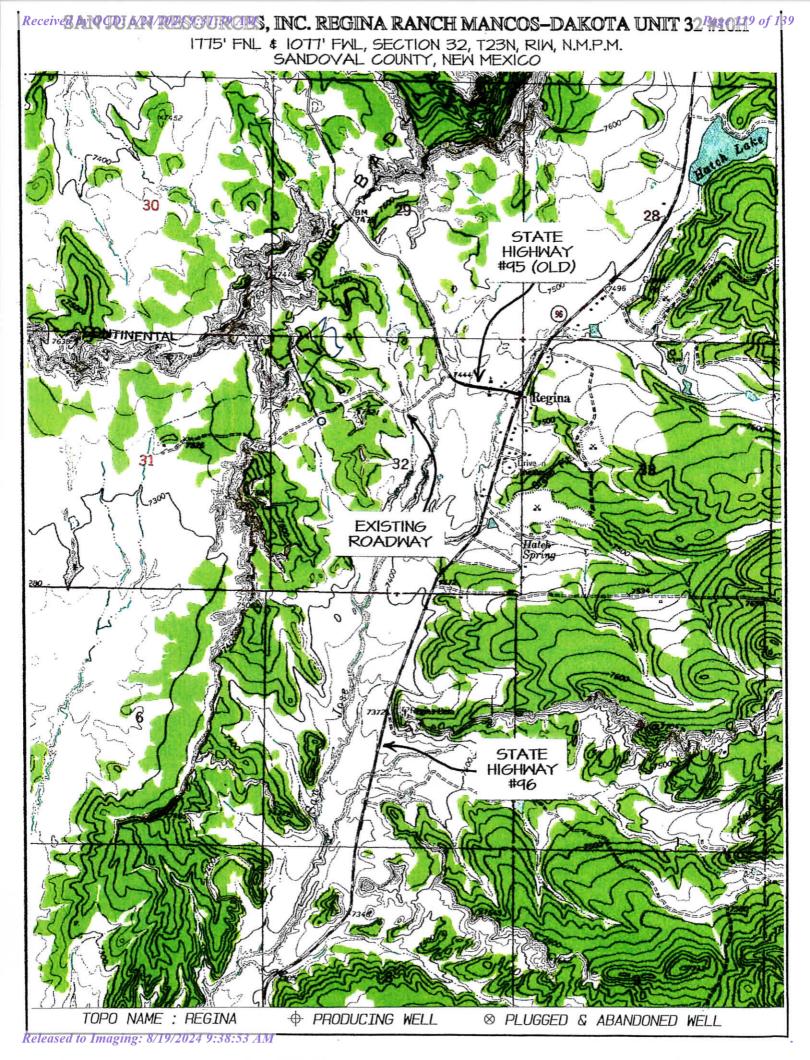
- Water control structures (such as culverts, ditches, and silt traps) and/or cattle guards may be cleaned. If this occurs, the soil/sediment material will be spread on area roads or locations.
- Bar ditches may be pulled.
- · Low water crossings and drainage dips may be cleared and/or repaired.
- Crowning may be repaired
- Litter may be collected
- Noxious weeds may be treated or controlled following the BLM-FFO noxious weed guidelines.
- The access road may be bladed.

ROAD INSPECTION FORM

Road Name:	County:
Date:	Time:
Weather:	
Inspector(s):	
Road Surface Type:	

			Road Condition
Road Condition Inspection Items	Good	Poor	Comment
Water Control Structure(s)			
Low Water Crossing(s)			
Road Crowning/Ruts/Potholes			
Road Surfacing			
Cattle Guard(s)			
Litter			
Noxious Weeds Within/Adjacent to Roadway			•
Vegetation Within Roadway			

Additional Site Specific Inspection Notes:



Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to San Juan Resources, Inc. Regina Ranch Mancos-Dakota Unit 32 #10H

1775' FNL & 1077' FWL, Section 32, T23N, R1W, N.M.P.M., Sandoval County, NM

Latitude: 36.182679°N Longitude: 106.971199°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7;

Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM;

Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side;

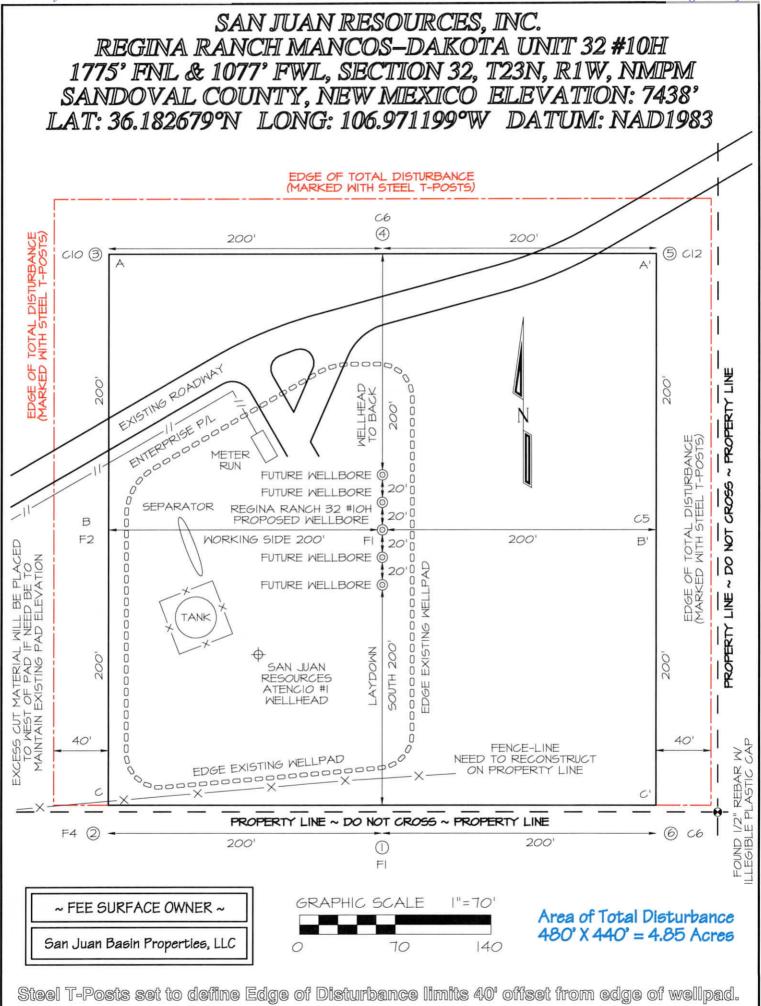
Go Left (South-westerly) on private road for 0.3 miles to fork in road;

Go Right (North-westerly) for 0.4 miles to San Juan Resources Regina Ranch Mancos-Dakota Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources Atencio #1 existing location.

Form C-102 State of New Mexico District I 1625 N. French Drive, Phone: (575) 393–6161 THIS COMPLETION NSOLIDATED OR A D BY THE DIVISION Hobbs, NM 88240 Fax: (575) 393-0720 Revised August 1, 2011 Energy, Minerals & Natural Resources Department Submit one copy to Appropriate District Office District II 811 S. First Street, Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 OIL CONSERVATION DIVISION 1220 South St. Francis Drive District III AMENDED REPORT 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 Santa Fe, NM 87505 District IV 1220 S. St. Francis Drive, Santa Fe, NM 87505 Phone: (505) 475-3460 Fax: (505) 476-3462 WELL LOCATION AND HAVE BEEN CONSC HAVE BEEN CONSC BEEN APPROVED I ACREAGE DEDICATION PLAT Pool Name 'API Number *Pool Code WC 23N1W32;MANCOS 98332 Well Number Property Code Property Name 10H REGINA RANCH MANCOS-DAKOTA UNIT 32 Elevation Operator Name OGRID No. INTERESTS I UNIT HAS SAN JUAN RESOURCES, INC. 7438 20208 ¹⁰ Surface Location County East/West line Feet from the North/South line Feet from the UL or lot no. Section Township Range Lot Idn WEST SANDOVAL NORTH 1077 32 23N 1W1775 E NON-STANDARD OWABL ¹¹ Bottom Hole Location If Different From Sunface North/South line Feet from the East/West line County Lot Idr Feet from the Range UL or lot no Section Township ALL 195 EAST SANDOVAL 74 SOUTH P 32 23N 1W 13 Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No. 2 Dedicated R-22075 359.64 LEASE LINE (C) 2639 'FNL 2090 'FwL SECTION 32-T23N-R1W LAT: 36.180286 'N LONG: 105.957168 'W DATUM: NAD1927 SURFACE LOCATION (A) 1775' FNL 1077' FWL SECTION 32-T23N-R1W FIRST TAKE POINT (B) 2239' FNL 1522' FWL SECTION 32-T23N-R1W LAT: 36.181383 'N LONG: 106.958756 'W TAKE POINT (D) BOTTOM-HOLE LOCATION (E) LAST 0 C 74 FSL 195 FEL SECTION 32-T23N-R1W LAT: 36.173246 N LONG: 106.955992 W 3848. 139' FSL 272' FEL SECTION 32-T23N-R1W 615. 001 716 LAT: 36.173425 N LONG: 105.957250 W LAT: 36.182660 N LONG: 106.970601 W E μ μ ш 06.51 LC) 15'90. DATUM: NAD1927 ŝ DATUM: NAD1927 DATUM: NAD1927 DATUM: NAD1927 .90 90. LAT: 36.173265 'N LONG: 106.957589 'W DATUM: NAD1983 LAT: 36.173443 *N LONG: 106.957847 *W DATUM: NAD1983 LAT: 36.182679 *N LONG: 106.971199 *W DATUM: NAD1983 LAT: 36.181402 N LONG: 106.969353 W DATUM: NAD1983 LAT: 36.180304 "N LONG: 106.967766 "W S49 549 S49 549 DATUM: NAD1983 (RECORD) N89 *53 W 2649.24 (RECORD) WEST 2645.28 (RECORD) N89 *59 W 2645.28 (RECORD) NB9 51 W 2640.00 N89 *33 10 W 2643.94 (MEASURED) N89 *31 '18 'W 2667.11 (MEASURED) N89 *30 '38 'W 2631.70 (MEASURED) 17 OPERATOR CERTIFICATION N89 '36 58 W 2643.94 ¹⁴ OPERAIOH CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. (MEASURED) 16 LOT 5 LOT 02 2640.55 ' 14 23 H.E.S. NO "03 W 2640.00 LOT Б CORD) 2638.0 224 H.E.S. 54 115 2234 1 21 51 E 2638. (MEASURED) *31.22 E 2676 (MEASURED) S.H.C. 226 (RECORD) •07 W 2642.1 4358 OIE .25.01'E A LOT H.E.S. NO IOTT 224 LOT LOT 12/20/27 N 2 LOT No 8 3 B LOT Date 1622 Э Signatur 9 33 John C. Thompson 549°06.5E 26 57 E 2638.13 (PECORD) 0.03 W 2640.00 58 H.E.S. 00 L01 5 Printed Nam 160 80 LOT (HECORD) 3 W 2640.0 225 NO -10 W 2636.70 Johnewalsheng.net NO 17 54 E 2640. -20 '09 'E 2599. 1 LOT E-mail Address 10 M. EO. ON SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or und my supervision, and that the same is true and correct to the best of my belief. See 2 2 LOT LOT R (MEASURED) 11 12 N89 '38'02 W 2641.77 T-23-N 195 Date Revised: SEPTEMBER 26, 2022 Date of Survey: JANUARY 27, 2022 T-22-N WEST 2640.00 (RECORD) (MEASURED) * (MEASURED) N89 *34 '12 'W 2636.12 (MEASURED) N89 *30 57 W 2647.06 7 8 Signature and Seal of Professional Surveyor 89 WEST 2640.00 (RECORD) WEST 2640.00 (RECORD) WEST 2640.00 (RECORD) (RECORD) 03 W 2638.E ND 15 39 E 2636. SON C. EDWARDS (MEASURED) MEXICO (RFCORD) JEN Y LOT LOT LOT LOT (CALCULATED) 26 53 E 5269.59 LOT LOT LOT LOT NO 02 W 5266.80 (RECORD) 1 3 2 1 4 7 2 N REFERENCE 5254.06'(S.M.EYOR 15269 (MEASURED) (RECORD) NO "03 W 2640.00 H. FO. 07. APOFESSION 2 N JASON DWARDS (RECORD) (RECORD (RECORD) (RECORD, S89 '53 W 2644.62 S89 *53 W 2644.62 S89 '54 W 2640.00 589 '54 W 2640.00 Certificate Number 15269 2 N89 *41 '13 'W 2640.39 (MEASURED) N89 *41 '39 'W 2664.07 (MEASURED) NB9 '42'11 W 2646.42 NB9 '38 '44 W 2636.20 (MEASURED) (MEASI IRED)

Page 121 of 139

Received by OCD: 6/24/2024 9:31:39 AM



Released to Imaging: 8/19/2024 9:38:53 AM

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION. EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

	7428	7438	7448'	C-C-
			· · · · · · · · · · · · · · · · · · ·	
		~~~~		
		1		
				** ** ** ** **
		_		
	X [1] X [2] X [3] X [4] X			· · · ·
	14 10 14 14 14 14 14 14 14			

ς	2
F	

				-				
			_					
		7428	(	14UV	1	7448	B-B_	
			-	_	_			1
	20 20 20 20 20 20 20 20 20 20 20 20 20 2							
		-						
	12	9		10			- 54	
				1				
	- X	- 2		1				
	-	8		1				
	8	8					2	
						÷	- 0 13	
	*			I		×		
	2	51 13					2 34	
							2	
						÷.		
				₩	-			
	÷	1				0 2	1	
		1					2	
		24 				- 2	19 	
		24				÷.	- 6	
		8				* 2	8 3	
						2 2	а 	
	4	5 C				- ×	14	5
				Ħ	-	Π.		21
	*					W	3	
	*				- 1	1		
				H	-			
	* 2	2 12				* 2	- 0 72	
	*	20 32				* 2	- 2 2	
	*	9						
	*						-	
	- ÷	3				8	8	
	*			1	_			
						*	*	
	1	- 8 - 1						
	н. 2	- 2		I		*	4 2	
	10 10	- A - X					*	
	50 10			t	1			
	8	8		T		2	- X - 1	
	100 M	- * 2		L		10 10 20		
						*		
				L			*	
	8					8		
	45 			•				
		*		1		4K	*	
ļ	N	3. R		2		75 45	•	
	5. 22	1		1				
	22. 1. 16	÷.		54 57				
ļ	10			2		1		
ļ	15 22	- × 		1		11 22		
1					- 11			



	SANDOVAL COUNTY, NEW MEXICO	LCOUNTY	, NEW MEX		ELEVATION: 7438'	\$ \$
	HORIZONTA	HORIZONTAL SCALE I"=60'		C/L	VERTICAL SCALE I"=30'	ALE 1"=30"
A - A'						
7448						
7438			/	_		
7428						

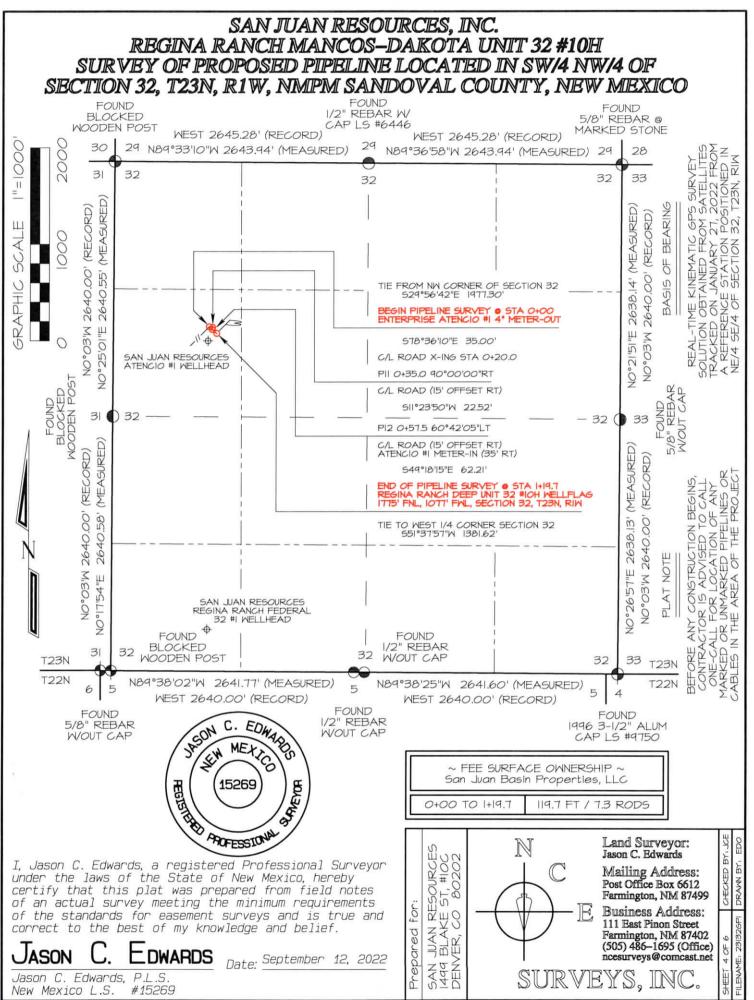
### Received by OCD: 6/24/2024 9:31:39 AM

SAN JUAN RESOURCES, INC. REGINA RANCH MANCOS-DAKOTA UNIT 32 #10H

" FWL, SECTION 32, T23N, RIW, NMPMI

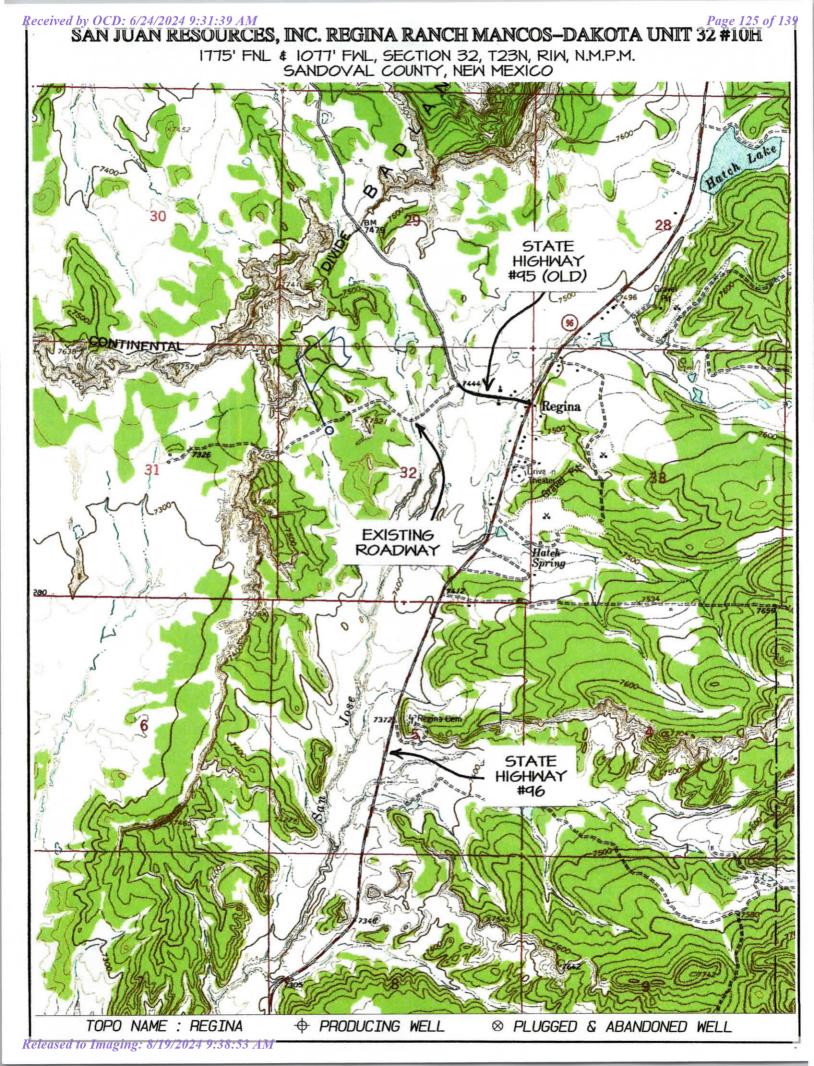
1775" FINL & 1077".

Received by OCD: 6/24/2024 9:31:39 AM



Released to Imaging: 8/19/2024 9:38:53 AM

Page 124 of 139



### Directions from the Intersection of US Hwy 550 & US Hwy 64

# in Bloomfield, NM to San Juan Resources, Inc. Regina Ranch Mancos-Dakota Unit 32 #10H

## 1775' FNL & 1077' FWL, Section 32, T23N, R1W, N.M.P.M., Sandoval County, NM

### Latitude: 36.182679°N Longitude: 106.971199°W Datum: NAD1983

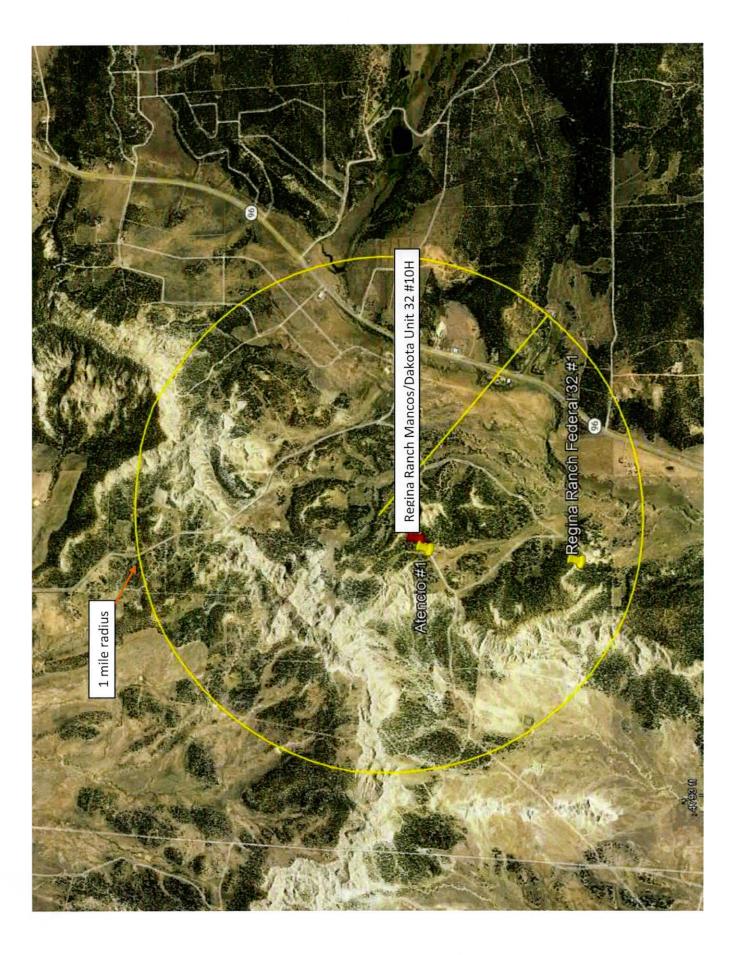
From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7;

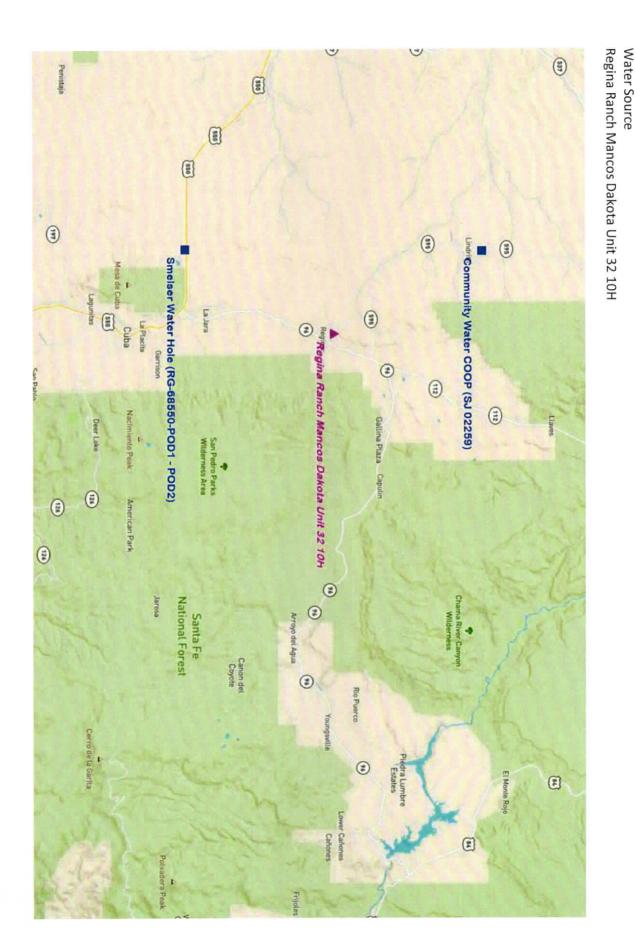
Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM;

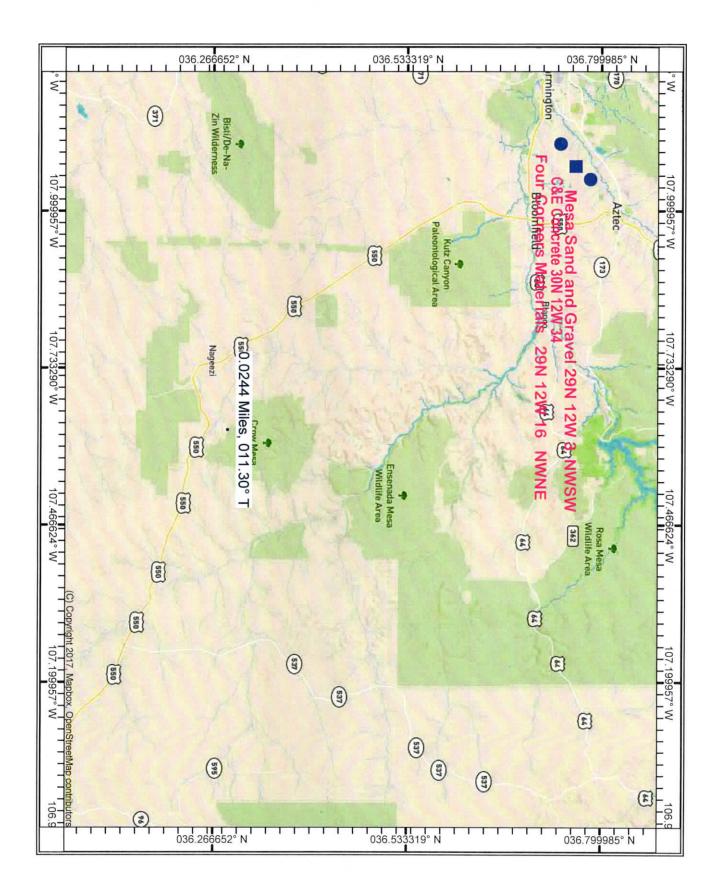
Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side;

Go Left (South-westerly) on private road for 0.3 miles to fork in road;

Go Right (North-westerly) for 0.4 miles to San Juan Resources Regina Ranch Mancos-Dakota Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources Atencio #1 existing location.





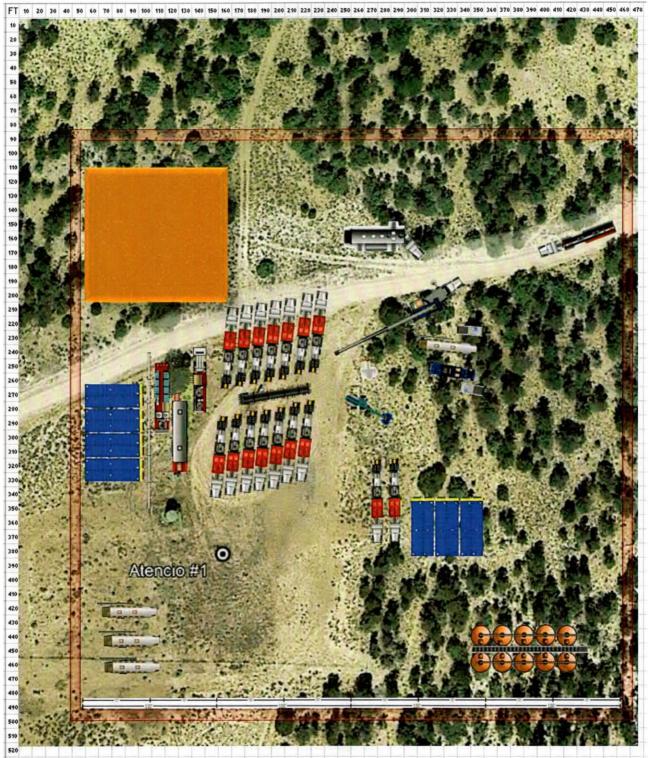


# A. Drilling Layout Diagram

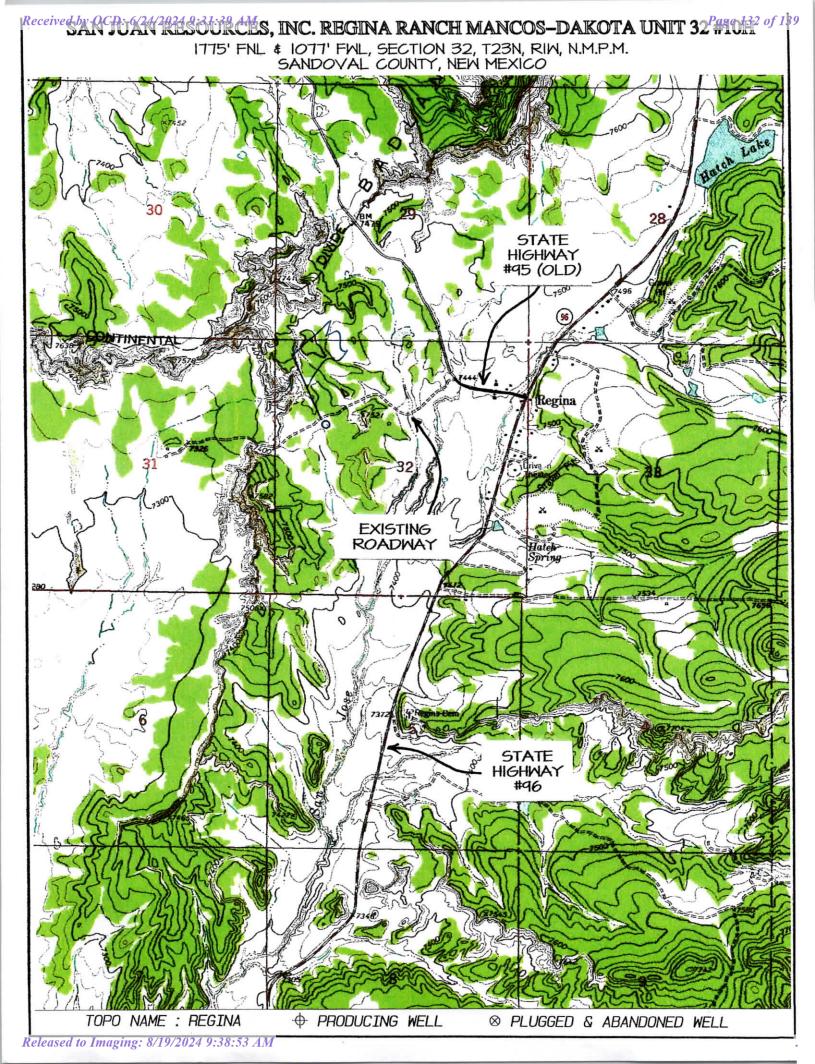
160 170 180

FT to 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 460 470

20 30 B. Completions Layout Diagram



FT 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470



# Directions from the Intersection of US Hwy 550 & US Hwy 64

# in Bloomfield, NM to San Juan Resources, Inc. Regina Ranch Mancos-Dakota Unit 32 #10H

# 1775' FNL & 1077' FWL, Section 32, T23N, R1W, N.M.P.M., Sandoval County, NM

# Latitude: 36.182679°N Longitude: 106.971199°W Datum: NAD1983

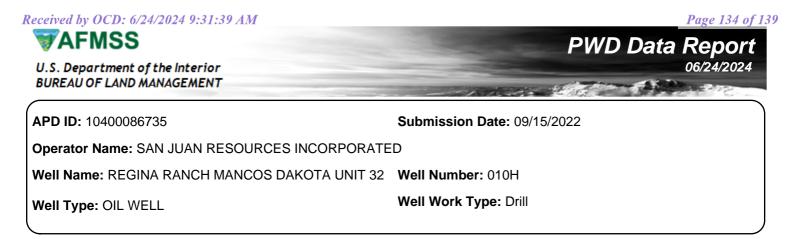
From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, at Farmer's Market travel Southerly on US Hwy 550 for 83.0 miles to NM State Highway #96 on left-hand side @ Mile Marker #68.7;

Go Left (North-easterly) on NM State Highway #96 for 8.5 miles to Old NM State Highway #95 on left-hand side in Regina, NM;

Go Left (North-westerly) on Old NM State Highway #95 in Regina, NM for 0.3 miles to private road on left-hand side;

Go Left (South-westerly) on private road for 0.3 miles to fork in road;

Go Right (North-westerly) for 0.4 miles to San Juan Resources Regina Ranch Mancos-Dakota Unit 32 #10H staked location on left-hand side which overlaps the San Juan Resources Atencio #1 existing location.



**Section 1 - General** 

Would you like to address long-term produced water disposal? NO

# Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N Produced Water Disposal (PWD) Location: **PWD surface owner:** Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit Pit liner description: Pit liner manufacturers Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule Lined pit reclamation description: Lined pit reclamation Leak detection system description: Leak detection system

**PWD** disturbance (acres):

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Lined pit Monitor description: Lined pit Monitor Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information

# **Section 3 - Unlined**

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

**Unlined pit** 

Precipitated solids disposal:

Decribe precipitated solids disposal:

### Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

**Unlined pit reclamation** 

Unlined pit Monitor description:

**Unlined pit Monitor** 

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

State

**Unlined Produced Water Pit Estimated** 

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Unlined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Unlined pit bond number: Unlined pit bond amount:

Additional bond information

# Section 4 -

Would you like to utilize Injection PWD options? N	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Injection PWD discharge volume (bbl/day):	
Injection well mineral owner:	
Injection well type:	
Injection well number:	Injection well name:
Assigned injection well API number?	Injection well API number:
Injection well new surface disturbance (acres):	
Minerals protection information:	
Mineral protection	
Underground Injection Control (UIC) Permit?	
UIC Permit	

# Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

**PWD surface owner:** 

**PWD disturbance (acres):** 

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 -

Would you like to utilize Other PWD options? N

Operator Name: SAN JUAN RESOURCES INCORPORATED

Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32 Well Number: 010H

Produced Water Disposal (PWD) Location:

PWD surface owner:

**PWD** disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

06/24/2024

reflects the most

recent changes <u>Show Final Text</u>

Bond Info Data



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

APD ID: 10400086735

Submission Date: 09/15/2022 Highlighted data

in the second

 Operator Name: SAN JUAN RESOURCES INCORPORATED

 Well Name: REGINA RANCH MANCOS DAKOTA UNIT 32
 Well Number: 010H

 Well Type: OIL WELL
 Well Work Type: Drill

# Bond

Federal/Indian APD: FED

BLM Bond number:

BIA Bond number:

Do you have a reclamation bond? NO

- Is the reclamation bond a rider under the BLM bond?
- Is the reclamation bond BLM or Forest Service?
- **BLM reclamation bond number:**
- Forest Service reclamation bond number:
- Forest Service reclamation bond
- **Reclamation bond number:**
- **Reclamation bond amount:**
- **Reclamation bond rider amount:**
- Additional reclamation bond 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 Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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

Page 139 of 139

CONDITIONS

Action 356862

CONDITIONS

Operator:	OGRID:
SAN JUAN RESOURCES, INC.	20208
1499 Blake St, #10C	Action Number:
Denver, CO 80202	356862
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

### CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	7/15/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/15/2024
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	7/15/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	7/15/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	7/15/2024
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	7/15/2024