# State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach Division Director Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: <u>6-12-15</u> Well information; Operator<u>SanJuan Resources</u>Well Name and Number <u>Lindrith 24 2 24 #1</u>

API# 30 039 - 31332, Section 24, Township 24 NS, Range 2 H

Conditions of Approval:

(See the below checked and handwritten conditions)

- Notify Aztec OCD 24hrs prior to casing & cement.
- Hold C-104 for directional survey & "As Drilled" Plat
- Hold C-104 for NSL, NSP, DHC
- Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
  - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
  - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
  - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- 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

Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84

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.

Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

NMOCD Approved by Signature

1220 South St. Francis Drive • Santa Fe, New Mexico 87505 Phone (505) 476-3460 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

RECEIVED OIL CONS. DIV DIST. 3

DEC 1 8 2015

٠.,

KP

JUN 1 5 2015

FORM APPROVED OMB No. 1004-0137

Form 3160 - 3 (March 2012)				FORM API OMB No. 10 Expires Octob	PROVED 004-0137 er 31, 2014	
UNITED STAT DEPARTMENT OF TH BUREAU OF LAND M	E INTERIOR	Farmi Bureau c	ngton Field Offic of Land Manager	8 ase Serial No. 1-128374		
APPLICATION FOR PERMIT T	O DRILL OR	REENTER	6. If N/A	Indian, Allotee or	Fribe Name	
la. Type of work: 🖌 DRILL 🗌 REE	NTER		7 If U N/A	nit or CA Agreeme	nt, Name and No.	
lb. Type of Well: 🖌 Oil Well 🗌 Gas Well 🗌 Other	Sin	gle Zone 🖌 Mult	tiple Zone 8. Lea	se Name and Well ITH 24-2-24 #1	No.	
2. Name of Operator SAN JUAN RESOURCES, INC.	9. AP 30-039	1 Well No. - 31332				
3a. Address 1499 BLAKE ST., SUITE 10C DENVER, CO 80202	10. Fiel GAVIL	d and Pool, or Expl . GREEN-GRAM	oratory N-DK & MANCOS			
<ol> <li>Location of Well (Report location clearly and in accordance with At surface 2195' FSL &amp; 795' FWL At proposed prod. zone SAME</li> </ol>	th arty State requireme	nts.*)	11. Sec. NWSV	, T. R. M. or Blk.a / 24-24N-2W N	nd Survey or Area MPM	
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>2 AIR MILES ESE OF LINDRITH, NM</li> </ol>			12. Con RIO A	inty or Parish RRIBA	13. State NM	
<ul> <li>15. Distance from proposed* 445' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)</li> </ul>	16. No. of ac 440	No. of acres in lease 17. Spacin all of Se S2 Sect		ing Unit dedicated to this well ection 24 for Mancos ction 24 for Greenhorn-Graneros-DK		
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed 8150'	19. Proposed Depth         20. BLM/I           3150'         NMB000		/BIA Bond No. on file )0199		
<ol> <li>Elevations (Show whether DF, KDB, RT, GL, etc.)</li> <li>7307' GL</li> </ol>	22. Approxim 10/01/201	vroximate date work will start* 23. Estimated duration /2015 1 MONTH				
	24. Attac	hments				
<ol> <li>The following, completed in accordance with the requirements of On</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO must be filed with the appropriate Forest Service Office)</li> </ol>	nshore Oil and Gas ( stem Lands, the ).	<ol> <li>Drder No.1, must be</li> <li>Bond to cover Item 20 above</li> <li>Operator certii</li> <li>Such other sit BLM.</li> </ol>	attached to this form: the operations unless ). fication le specific information	covered by an exi and/or plans as ma	sting bond on file (see	
25. Signature Billier	Name BRIAI	(Printed/Typed) N WOOD (P	HONE: 505 466-81	20) Da	te 6/12/2015	
CONSULTANT 74		(F	AX: 505 466-9682)			
Approved by (Signature)	Name	(Printed/Typed)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Da	ite 17/15/15	
Title AFM	Office	FFO		15.0	<u>(~)/////</u>	
Application approval does not warfant or certify that the applicant conduct operations thereon. Conditions of approval, if any, are attached.	holds legal or equit	able title to those rig	ghts in the subject lease	which would entit	le the applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make in States any false, fictitious or fraudulent statements or representation	t a crime for any person and the second s	erson knowingly and ithin its jurisdiction.	willfully to make to ar	ny department or a	gency of the United	
(Continued on peeca2) E SUBJECT TO AUTHOR WITH ATTACHED COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS" ACTION OPERAT AUTHOR ON FEDI	DOES NOT R OR FROM OB LIZATION RE ERAL AND IN	ELIEVE THE STAINING AN QUIRED FOR IDIAN LANDS	LESSEE AND Y OTHER OPERATIONS	*(Instruct This action is and procedur 43 CFR 3165 pursuant to 4	subject to Resence al review pursuant to .3 and appeal 3 CFR 3165.4	
	NINULA	MOCD				

<sup>12</sup> Dedicated Acres 320	13 Joint o	r Infill 14	Consolidation	Code 1	15 Order No.				1. 1. 1. 1
UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from th	e North/South Line	Feet from the	East/West Line	County
N. N. S. S. LA	1. 1 × 1	27.5	11 Bc	ottom H	Iole Location	If Different From	n Surface		
UL or Lot No. L	Section 24	Township 24 N	Range 2 W	Range         Lot Idn.         Feet from the         North/South Line         Feet from the         East/West L           2 W         2195         South         795         West				East/West Line	County Rio Arriba
	- 11.4				10 Surfac	e Location			and the second
<sup>7</sup> OGRID N 20208	o. }			S	AN JUAN R	ESOURCES, INC	2.		<sup>9</sup> Elevation 7307
Property Con 31570	45		<sup>5</sup> Property Name LINDRITH 24-2-24						<sup>6</sup> Well Number 1
30-039- 2	PI Number	2		<sup>2</sup> Pool Coo 2719	<sup>de</sup> )2	GAVILAN GRE	EENHORN	GRANER	OS DK (OIL)
Phone: (505) 334-617 <u>District IV</u> 1220 S. St. Francis D Phone: (505) 476-346	<ul> <li>78 Fax: (505)</li> <li>7., Santa Fe, 1</li> <li>50 Fax: (505)</li> </ul>	NM 87505 ) 476-3462	WELL L	OCATI	Santa Fo	e, NM 87505 CREAGE DEDIC	Farming Bureau of L CATION PLA	ton Field Office and Manager	MENDED REPORT
811 S. First St., Artes Phone: (575) 748-128 District III 1000 Rio Brazos Rd.,	ia, NM 8821 33 Fax: (575) Aztec, NM	0 ) 748-9720 87410	Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION JUN 1 5 20 1220 South St. Francis Dr.						e copy to appropriate District Office
1625 N. French Dr, H Phone: (575)393-616 District II	obbs, NM 81 1 Fax: (575)	State of New Mexico RECEIVE							Form C-102

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

° S 89	S 89 <sup>°</sup> 56' W		05 Ch. ප්ර	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a computibory pooling order heretofore entered by the skirisign.
80.0	Sec.		80.0	Signature Brian Wood Date Date Date Date Date Date Date Date
795' •	Lat. : 36.294949° N Long : 107.007693° W (NAD 83)	24	\$	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
S 89	°56' W	80.0	02 Ch.	Date of Surger Signature and Sear of Appresticual Surveyor: William E. Marinke II Certificate Number

Bearings from GLO Plat

District I									
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) 476-3460 Fax: (505) 476-3462			E	O	State of 1 Minerals & Nation Mill CONSERV 1220 South Santa Fe,	New Mexico ural Resources Dep ATION DIVISIO St. Francis Dr. NM 87505	artment N	I Submit o	Form C-102 Revised August 1, 2011 one copy to appropriate District Office AMENDED REPORT
			WELL L	UCA	HON AND AC	REAGE DEDIC	ATION PLA	.1	
30-039-	BI33	2	27194 GAVILAN MANCOS				A. Carlos and		
<sup>4</sup> Property Co	de			<sup>5</sup> Property Name LINDRITH 24-2-24					• Well Number 1
<sup>7</sup> OGRID N 20208	o. 3			<sup>operator Name</sup> SAN JUAN RESOURCES, INC.					<sup>9</sup> Elevation 7307
	12.0				10 Surface	Location			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
UL or Lot No. L	Section 24	Township 24 N	Range 2 W	Lot Io	ot Idn. Feet from the North/South Line Feet from the 2195 South 795		Feet from the 795	East/West Lin West	e County Rio Arriba
12	are sure	1000	11 Be	ottom	Hole Location	If Different From	Surface		
UL or Lot No.	Section	Township	Range	Range         Lot Idn.         Feet from the         North/South Line         Feet from the         East/West Line				e County	
<sup>12</sup> Dedicated Acres 640	13 Joint of	or Infill	<sup>14</sup> Consolidation C	a Code	15 Order No.	1		-	

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

89 200 CY.	°56' W Sec.	80.0	05 Ch. 	17       OPERATOR CERTIFICATION         Interesty certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either was 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 mineral or working interest, or to a voluntary pooling agreement or a compliancy pooling order heretofee entrem by the division.         6-12-15         Signature         Brian Wood         Printed Name         E-mail Address
795' • M.L	Lat. : 36.294949° N Long : 107.007693° W (NAD 83)	24	th	<sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
00 N Fd. GLO BC (Typ.) S 89	°56' W	80.0	2 02 Ch.	Date of Street Signeture and Sear of Profestional Surveyor: # 8466 William E. Mathicke II Certificate Number 8466

Bearings from GLO Plat

# **Drilling Program**

# 1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	Elevation
San Jose	0'	+7,307'
Ojo Alamo Ss	2,728'	+4,579'
Fruitland	3,048'	+4,259'
Fruitland coal	3,178'	+4,129'
Pictured Cliffs Ss	3,260'	+4,047'
Cliff House	4,993'	+2,314'
Menefee	5,076'	+2,231'
Point Lookout Ss	5,444'	+1,863'
Gallup Ss	6,518'	+789'
Niobrara A	6,615'	+692'
Niobrara B	6,705'	+602'
Niobrara C	6,810'	+497'
Greenhorn Ls	7,592'	-285'
Dakota Ss	7,720'	-413'
Dakota D	7,853'	-546'
Total Depth	8,150'	-843'

# 2. NOTABLE ZONES

<u>Oil & Gas Zones</u> Pictured Cliffs Gallup (secondary goal) Dakota (primary goal) Water Zones San Jose Ojo Alamo <u>Coal Zone</u> Fruitland

Water zones will be protected with casing, cement, and weighted mud. Fresh water will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.



PERMITS WEST, INC.

## 3. PRESSURE CONTROL (See PAGE 2)

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3000 psi model is on the preceding page. Minimum specifications for such a system are:

- 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
- One 11" 3000 psi WP double-ram preventer with 1 set of blind rams on top and 1 set of pipe rams on bottom complete with hand wheels and extension arms.
- The choke and kill lines will be connected to outlets between the bottom and top rams, using either the ram body outlet or a drilling spool with side outlets for a 2" kill line and a minimum 3" choke line.
- One 11" x 3000 psi WP Hydril GK (or equivalent) annular preventer.
- Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote backup. The accumulator will 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 pre-charge on the closing manifold without the use of the closing unit pumps. The reservoir capacity will be double the usable accumulator capacity, and the fluid level will be maintained at the manufacturer's recommendations.
- The BOP system shall have two 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 will be recharged when the pressure falls below manufacturer's specification.
- A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator system is inoperative.

All BOPE will be hydraulically operated with controls accessible on the rig floor.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3000 psi WP casing head before drilling out from under surface casing. All ram preventers and related equipment will be tested to 3000 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 the 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 will be activated each trip, or at least weekly. The OCD and the BLM will be notified 24 hours before testing of BOPE.

## 4. CASING & CEMENT

Туре	Depth Set	Hole	Casing	#/ft	Grade	Thread	API	Age
Conductor	60'	26"	16"				No	New
Surface	500'	12.25"	9.625"	36	J-55	LT&C	Yes	New
Production	8150'	7.875"	5.5"	17	J-55	LT&C	Yes	New

Casing strings below the conductor pipe will be tested to 0.22 psi/foot of casing string length, or to 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. Minimum casing design factors used are:

Burst	Collapse	Joint Strength
1.0	1.125	1.60

Surface casing will have a guide shoe, 2 joint shoe track, and float collar. One centralizer will be stop-locked on the first joint, then one centralizer on each of the next two joints, and then one on every other joint to surface. A total of approximately 8 centralizers will be used.

The production casing will have a float shoe, 1 joint shoe track, float collar, casing to DV tool. The DV tool will be placed at  $\approx$ 5500'. Production casing will be centralized using 1 bow spring centralizer stop locked in the middle of the first joint, 1 bow spring centralizer for the next 2 joints, and 1 bow spring centralizer

PERMITS WEST, INC.

PAGE 5

San Juan Resources, Inc. Lindrith 24-2-24 #1 2195' FSL & 795' FWL Sec. 24, T. 24 N., R. 2 W. Rio Arriba County, New Mexico

every 4<sup>th</sup> join to  $\approx 6500'$ . Run 1 bow spring centralizer below and above the DV tool. Run 1 bow spring centralizer every 4<sup>th</sup> joint to 2700'. A total of approximately 29 bow spring centralizers will be used. If needed, will strategically place 2 cement baskets below the DV tool.

The cement program will 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 will receive approval prior to use. The casing setting depth is calculated to position the casing seat opposite a competent formation that will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water will be reported.

Top plugs will 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. will be used to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

# Surface Casing - Single Stage Job (GL' - 500'):

Excess = 125% over gauge hole (12-1/4" hole and 9-5/8" casing (0.3132 ft<sup>3</sup>/ft) Top of Cement (437 ft<sup>3</sup>) = surface

Lead: 85 sx (254 ft<sup>3</sup>) mixed @ 11.5 ppg, conventional cement containing: Cement: Halliburton VARICEM CEMENT 0.125#/sk Poly-E-Flake 0.25#/sk Kwick Seal Yield: 2.989 ft<sup>3</sup>/sx Compressive strength @ 24 hr ≥1000 psi

Tail: 100 sx (183 ft³) mixed @ 13.5 ppg, conventional cement containing:Cement: Halliburton VARICEM CEMENT0.125#/sk Poly-E-Flake0.25#/sk Kwick SealYield: 1.831 ft³/sxCompressive strength @ 24 hr ≥1000 psi



<u>Production Casing – Two Stage Job (GL - 8150'):</u> Excess = 35% over gauge hole (7-7/8" hole and 5-1/2" casing (0.1733 ft<sup>3</sup>/ft) Top of Cement (1923 ft<sup>3</sup>) = surface

1<sup>st</sup> Stage

Lead (7500' – 5500'): 160 sx (478 ft<sup>3</sup>) mixed @ 11.5 ppg, conventional cement: Cement – Halliburton VARICEM CEMENT 0.125#/sk Poly-E-Flake 0.25#/sk Kwick Seal Yield – 2.989 ft<sup>3</sup>/sx Compressive strength @ 24 hr ≥1000 psi

Tail (8150' – 7500'): 80 sx (158 ft<sup>3</sup>) mixed @ 12.0 ppg, conventional cement: Cement – Halliburton HALCEM 0.05% sa-1015 5 LBM Kol-Seal 0.125#/sk Poly-E-Flake Yield: 1.97 ft<sup>3</sup>/sx Compressive strength @ 24 hr  $\geq$ 1500 psi

2<sup>nd</sup> Stage

Lead (2700' – GL): 365 sx (1090 ft<sup>3</sup>) mixed @ 11.5 ppg, conventional cement: Cement – Halliburton VARICEM CEMENT 0.125#/sk Poly-E-Flake 0.25#/sk Kwick Seal Yield: 2.989 ft<sup>3</sup>/sx Compressive strength @ 24 hr ≥1000 psi

Tail (5500' – 4650'): 100 sx (197 ft<sup>3</sup>) mixed @ 12.0 ppg, conventional cement: Cement – Halliburton HALCEM 0.05% sa-1015 5 LBM Kol-Seal 0.125#/sk Poly-E-Flake Yield: 1.97 ft<sup>3</sup>/sx Compressive strength @ 24 hr  $\geq$ 1500 psi



PAGE 7

San Juan Resources, Inc. Lindrith 24-2-24 #1 2195' FSL & 795' FWL Sec. 24, T. 24 N., R. 2 W. Rio Arriba County, New Mexico

Cement volumes are minimums and may be adjusted based on caliper log results and hole conditions. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and OCD requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected. All waiting on cement times will be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe before drilling out.

## 5. MUD PROGRAM

Hole O. D.	Interval	Mud Type	Density (Ib/gal)	Viscosity (sec/qt)	Fluid Loss
12.25"	GL - 500'	Fresh Water	8.3 - 9.4	28 - 42	NC
7.875"	500' - 3650'	Fresh Water LSND	8.6 - 9.2	35 - 70	8 - 10 cc
7.875"	3650' - TD	Fresh Water LSND	8.6 - 9.2	40 - 54	<6 cc

Sufficient mud will be on location to control a blowout should one occur. Mud flow and volume will be monitored visually and with electronic pit volume totalizers. Mud tests will be performed every 24 hours after mudding up to determine, as applicable, density, viscosity, gel strength, filtration, and pH.

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 used to hold cuttings and fluids for rig operations. A frac tank will be on site to store fresh water. Drill cuttings will be buried on site in compliance with Rule 19. Any waste water not used in drilling will be disposed of at the OCD approved TnT Environmental Disposal Facility.



# 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Open hole triple combo with dipole sonic logs will be run from the base of the surface casing to TD. Mud logger will be on site from 500' to TD.

# 7. DOWN HOLE CONDITIONS

Abnormal pressures, temperatures, or hydrogen sulfide are not expected. Maximum bottom hole pressure will be 2918 psi based on 9.0 ppg at 8150' (TD).

#### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take  $\approx 2$  weeks to drill and  $\approx 2$  weeks to complete the well.





## Surface Use Plan

## 1. DIRECTIONS & EXISTING ROADS (See PAGES 15 - 18)

From the Lindrith Post Office...

Go South 3/4 mile on paved NM 595 to the equivalent of Mile Post 10.2 Then turn left south of the ballpark and go east 2.4 miles on dirt County Road 394 Then turn left and go North 1/10 mile on a dirt road to a fork Then continue North 267.36' on the abandoned Oso well road Then turn right and go NE 72.32' cross-country to the proposed pad

Roads will be maintained to at least equal to their present condition.

# 2. ROAD TO BE BUILT OR UPGRADED (See PAGES 17 & 18)

Enterprise will be called before construction starts to mark adjacent pipelines. The final 339.68' of road will be upgraded (267.36') and built (72.32') to BLM Gold Book standards. Road will be crowned, ditched, and have a  $\approx$ 14' wide running surface. Maximum disturbed road width will be 30'. Maximum cut or fill = 3'. Maximum grade = 4%. A 24" x 30' CMP culvert will be installed on the new road. A berm will be built NW of Station 1+88.4. The new west borrow ditch will turn out before Station 0+00. No cattle guard or vehicle turn out is needed.

## 3. EXISTING WELLS (See PAGE 16)

State records show 1 gas well, 5 water wells, and 14 plugged and abandoned wells within a one mile radius. There are no disposal, injection, or oil wells within a mile.



PAGE 9

PAGE 10

San Juan Resources, Inc. Lindrith 24-2-24 #1 2195' FSL & 795' FWL Sec. 24, T. 24 N., R. 2 W. Rio Arriba County, New Mexico

## 4. PROPOSED PRODUCTION FACILITIES (See PAGES 17 & 18)

A 466.62' long steel 4-1/2" O. D. gas line will be laid southeast to Enterprise's existing riser. All of route parallels a road and/or 1 or more pipelines (NMNM-058335 & NMNM-065198). The gas line will be buried  $\approx$ 36" deep and 15' from the adjacent road centerline. Production facilities will be installed on the pad and will include a separator, dehydrator, meter run, and tank battery. A Sundry Notice will be filed before installation once production volumes are known and the size and exact location of the equipment is known. All of the equipment will be painted a flat juniper green. Engines will be muffled.

# 5. WATER SUPPLY (See PAGES 15 - 18)

Water will be trucked from well SJ 02259 on private land in SESENE 16-24n-2w.

## 6. CONSTRUCTION MATERIALS & METHODS (See PAGES 18 & 19)

Enterprise and NM One Call will be called before construction starts. Trees will be cut into 4 to 5 foot lengths and stacked on the pad for the public. Limbs will be scatted on bare dirt. The top 6" of soil will be bladed and piled around the perimeter of the pad. Pit subsoil will be piled north of the pit and separate from the topsoil. A silt trap will be built north of the topsoil pile and near centerline left.

## 7. WASTE DISPOSAL

A  $\geq$ 20 mil plastic liner will be installed in the reserve pit. The pit will be fenced sheep tight on 3 sides with woven wire fence topped with barbed wire. The fourth side will be fenced once the rig moves off. The fence will be kept in good repair while the pit dries. Once dry, pit contents will be buried in place.





TYPICAL BOP STACK & CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available. Safety valve and subs will fit all drill string connections in use. All BOPE connections subjected to well pressure will be flanged, welded, or clamped.