

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) unknown
Address _____

GEOLOGICAL TARGET FORMATION, Eik

Estimated depth of completed well, 5500 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 150 feet; salt, 0 feet.

Approximate coal seam depths: none Is coal being mined in the area? Yes _____ / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			New	Used	FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft			For drilling	Left in well		
Conductor	11 3/4	CW	45#	X		245	245	CTS	Kinds
Fresh Water	8 5/8	ERW	23#	X		1200	1200	350 SKS	Baker
Coal									Sizes
Intermediate									
Production	4 1/2	ERW	10.5#	X		0	5500'	750 SKS	Depths set 4000'
Tubing	2 3/8	CW	4.7#	X		0	4000'	0	
Liners									Perforations: est depth
									Top 3200 Bottom 5300

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE.
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR drilling **. THIS PERMIT SHALL EXPIRE**
IF OPERATIONS HAVE NOT COMMENCED BY 2-8-83 **.**

BY [Signature]

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER


The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location 04/19/2024 proposed this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.


Date: _____, 19 _____

By _____
Its _____

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE PULLMAN 7.5'

LEGEND

Well Site 


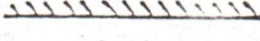
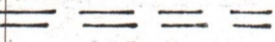






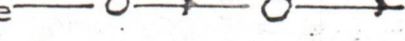

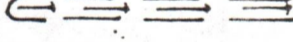
Access Road 

Attached

WELL SITE PLAN

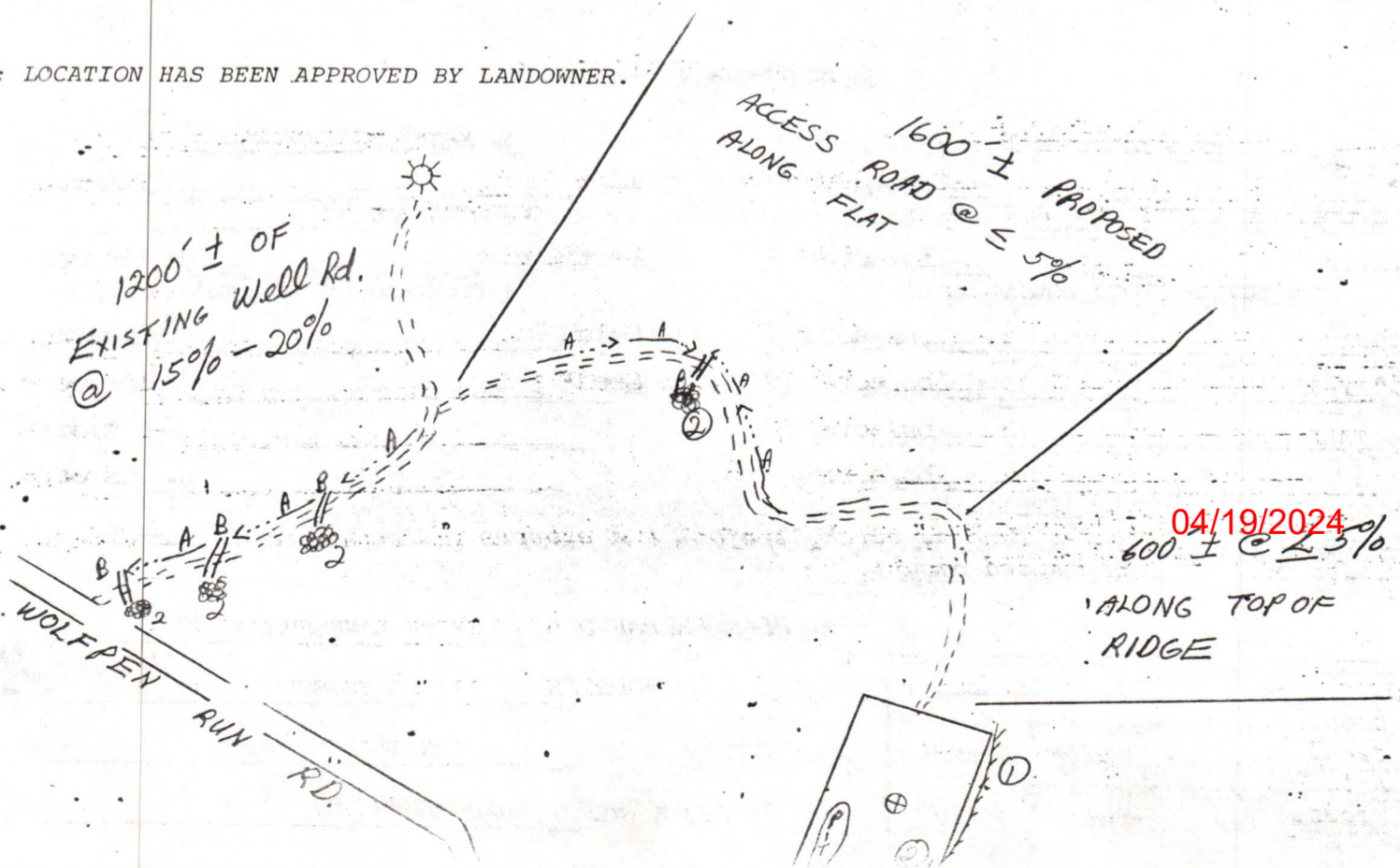
Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

LEGEND

Property boundary 	Diversion 
Road 	Spring 
Existing fence 	Wet spot 
Planned fence 	Building 
Stream 	Drain pipe 
Open ditch 	Waterway 

NOTE: LOCATION TO BE BUILT IN OLD FIELD OFF EDGE OF RIDGE.

NOTE: LOCATION HAS BEEN APPROVED BY LANDOWNER.



State of West Virginia

WELL NO. CRANE "A" NO. 1

API NO. 47-085-5680

Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME RIMROCK PRODUCTION CORP.

DESIGNATED AGENT ROBERT L. MURDOCK

Address 4424B EMERSON AVE., PARKERSBURG, W.V. 26101 Address 4424B EMERSON AVE., PARKERSBURG, W.V.

Telephone 304-428-1520

Telephone 304-428-1520

LANDOWNER WALTER C. CRANE

SOIL CONS. DISTRICT LITTLE KANAWHA

Revegetation to be carried out by RIMROCK PRODUCTION CORP (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 5-29-82

(Date)

Jarrett Newson
(SCD Agent)

ACCESS ROAD	LOCATION
Structure <u>DRAINAGE DITCH</u>	(A) Structure <u>DIVERSION DITCH</u> (1)
Spacing <u>N/A</u>	Material <u>EARTHEN</u>
Page Ref. Manual <u>I:9</u>	Page Ref. Manual <u>I:11</u>
Structure <u>CROSS DRAIN</u>	(B) Structure <u>SEDIMENT BARRIER</u> (2)
Spacing <u>150'</u>	Material <u>BRUSH OR LOGS</u>
Page Ref. Manual <u>I:4</u>	Page Ref. Manual <u>RECEIVED</u>
Structure _____	(C) Structure <u>JUN 2 - 1982</u> (3)
Spacing _____	Material <u>OIL AND GAS DIVISION</u> WV DEPARTMENT OF MINES
Page Ref. Manual _____	Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area I & II	Treatment Area VI
Lime _____ Tons/acre or correct to pH <u>6.5</u>	Lime _____ Tons/acre or correct to pH _____
Fertilizer <u>600</u> lbs/acre (10-20-20 or equivalent)	Fertilizer _____ lbs/acre (10-20-20 or equivalent)
Mulch <u>HAY</u> <u>2</u> Tons/acre	Mulch _____ Tons/acre
Seed* <u>KY-31</u> <u>35</u> lbs/acre	Seed* _____ lbs/acre
<u>TALL FESCUE</u> <u>10</u> lbs/acre	_____ lbs/acre
_____ lbs/acre	_____ lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

04/19/2024

PLAN PREPARED BY SMITH LAND SURVEYING

ADDRESS 111 SOUTH STREET

GLENVILLE W.V. 26351

PHONE NO. 304-462-5634

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.



(SMITHVILLE)
4762 II SE

Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Topography by photogrammetric methods from aerial photographs
 taken 1962. Field checked 1964
 Polyconic projection. 1927 North American datum
 10,000-foot grid based on West Virginia coordinate system, north zone
 1000-meter Universal Transverse Mercator grid ticks,
 zone 17, shown in blue
 Fine red dashed lines indicate selected fence and field lines where
 generally visible on aerial photographs. This information is unchecked



UTM GRID AND 1964 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

RECEIVED

JUN 2 - 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

04/19/2024

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Stage #1	4400-5235'	33 holes
	1,010,000 SCF N ₂	
Stage #2	3480-4350'	38 holes
	993,000 SCF N ₂	
Stage #3	2580-3420	39 holes
	1,000,000 SCFN ₂	

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand and Shale			Surface	1500	
Sand, Shale, and Lime			1500	2100	
Shale			2100	2132	
Injun Sand			2132	2170	
Shale & Siltstone			2170	2416	
Sandstone & Siltstone (Wier)			2416	2492	
Siltstone & Shale			2492	2576	
Berea Sand			2550	2555	
*Devonian Shale			2580	5114	
Alexander Sand			5114	5140	
Siltstone & Shale			5140	5315	

(Attach separate sheets as necessary)

*Most Devonian formation names not differentiated.

RIMROCK PRODUCTION CORPORATION

Well Operator

By: Alison Crane

Alison Crane

04/19/2024

Date:

Spt 11, 1982

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including ... encountered in the drilling of a well."



Date September 11, 1982
Operator's Well No. Crane "A" #1
Farm Crane A
API No. 47 - 085 - 5680

SEP 15 1982

OIL & GAS DIVISION
DEPT. OF MINE

State of West Virginia
Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas," Production / Underground Storage / Deep / Shallow /)

LOCATION: Elevation: 1173 Watershed Wolfpen Run
District: Union County Ritchie Quadrangle Pullman 7.5

COMPANY RIMROCK PRODUCTION CORPORATION

ADDRESS 4424 "B" Emerson Ave., Parkersburg, WV

DESIGNATED AGENT Robert L. Murdock

ADDRESS 4424 "B" Emerson Ave., Parkersburg, WV

SURFACE OWNER Walter A. Crane Heirs

ADDRESS 212 E. Pierpoint St., Harrisville, WV

MINERAL RIGHTS OWNER Walter A. Crane Heirs

ADDRESS 212 E. Pierpoint St., Harrisville, WV

OIL AND GAS INSPECTOR FOR THIS WORK Deo

Mace ADDRESS Rt. 1 Box 5 Sandridge, WV

PERMIT ISSUED _____

DRILLING COMMENCED June 12, 1982

DRILLING COMPLETED June 18, 1982

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
11 3/4 13-10"	45'	45'	
9 5/8			
8 5/8	1305	1305	390 sks
7			
5 1/2			
4 1/2	5260	5260	750 sks.
3			
2 3/8	0	3412	0
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 2555-5315 feet

Depth of completed well 5325 feet Rotary / Cable Tools _____

Water strata depth: Fresh 150 feet; Salt 0 feet

Coal seam depths: _____ Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2580-5235 feet

Gas: Initial open flow 525 Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 258 Mcf/d Final open flow 3 Bbl/d

Time of open flow between initial and final tests 12 hours

Static rock pressure 591.00 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation _____ Pay zone depth _____ feet

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after _____ hours shut in

RIT. 5680

04/19/2024

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS WELLS DIVISION

RECEIVED

INSPECTOR'S WELL REPORT

JUN 25 1982

Permit No. 85-0688

OIL AND GAS DIVISION
 WV DEPARTMENT OF MINES
 Oil or Gas Well _____
 (KIND)

Company <u>Quin Rock</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Crane</u>	16			Kind of Packer _____
Well No. <u>A-1</u>	13			
District <u>Union</u> County <u>Put</u>	10			Size of _____
Drilling commenced _____	8 1/4			
Drilling completed _____ Total depth _____	6 5/8			Depth set _____
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom _____
Volume _____ Cu. Ft.	Liners Used			Perf. top _____
Rock pressure _____ lbs. _____ hrs.				Perf. bottom _____
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED <u>8 5/8</u> SIZE <u>1295</u> No. FT. <u>6-14-82</u> Date			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY <u>Habit.</u>			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names FWA - Harley Jarvis

Remarks: cement circulated

6-14-82

DATE

D. W. Mace 04/19/2024

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED
APR 25 1983

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 85-5680

Oil or Gas Well _____
(KIND)

Company Rimrock Prod. Corp.
 Address _____
 Farm Crane A.
 Well No. Crane "A" #1
 District Union County Ritchie
 Drilling commenced _____
 Drilling completed _____ Total depth _____
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4			
6 5/8			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____
 NAME OF SERVICE COMPANY _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Drillers' Names _____

Remarks: Final Inspection O.K. to Release

4-19-83
DATE

Samuel N. ...
DISTRICT WELL INSPECTOR



State of West Virginia
Department of Mines
Oil and Gas Division
Charleston 25305

WALTER N. MILLER
DIRECTOR

THEODORE M. STREIT
ADMINISTRATOR

May 9, 1983

Rimrock Production Corporation
4424 Emerson Avenue
Parkersburg, W. Va. 26101

Gentlemen:

The required records and reports have been received in this office and the District Inspectors have submitted FINAL INSPECTIONS for the following wells listed below:

<u>PERMIT NUMBER</u>	<u>FARM AND WELL NUMBER</u>	<u>DISTRICT</u>
RIT-5455-FRAC.	E. C. Curry, #1	Union
RIT-5469	Olin D. Baker/Lettie M. Baker #1	Clay
RIT-5516-REFRAC.	Walter A. Crane Heirs, #1	Union
RIT-5590	Freda & Leonard Byrd, #1	Union
RIT-5611	Martin Corbin, et al, #1	Grant
RIT-5680	Walter A. Crane Heirs, "A" #1	Union
RIT-5685	Grace Cox, et al, #1	Union
RIT-5698	Carl Dotson, #1	Grant
RIT-5709	Merrill G. Hedrick, #1	Grant
RIT-5711	Merrill G. Hedrick, #2	Grant
RIT-5718	Elsie Cameron, Agent, #1	Union
RIT-5720	Cecil C. Gardner, #1	Grant
RIT-5752	Emmett Moyers, #1	Grant
RIT-5844	Arrahwanna Pifer, #1	Grant
RIT-5845	Floyd Pifer, et al, #1	Grant

In accordance with Chapter 22, Article 4, Section 2, the above captioned wells will remain under bond coverage for "life of wells." Reclamation requirements have been approved.....

Very truly yours,

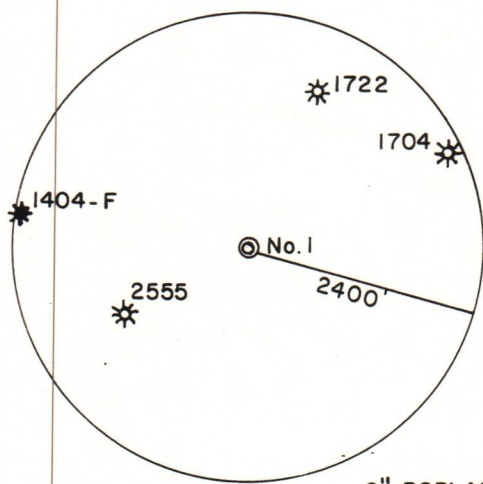
Theodore M. Streit, Administrator
Office of Oil & Gas-Dept. Mines

TMS/

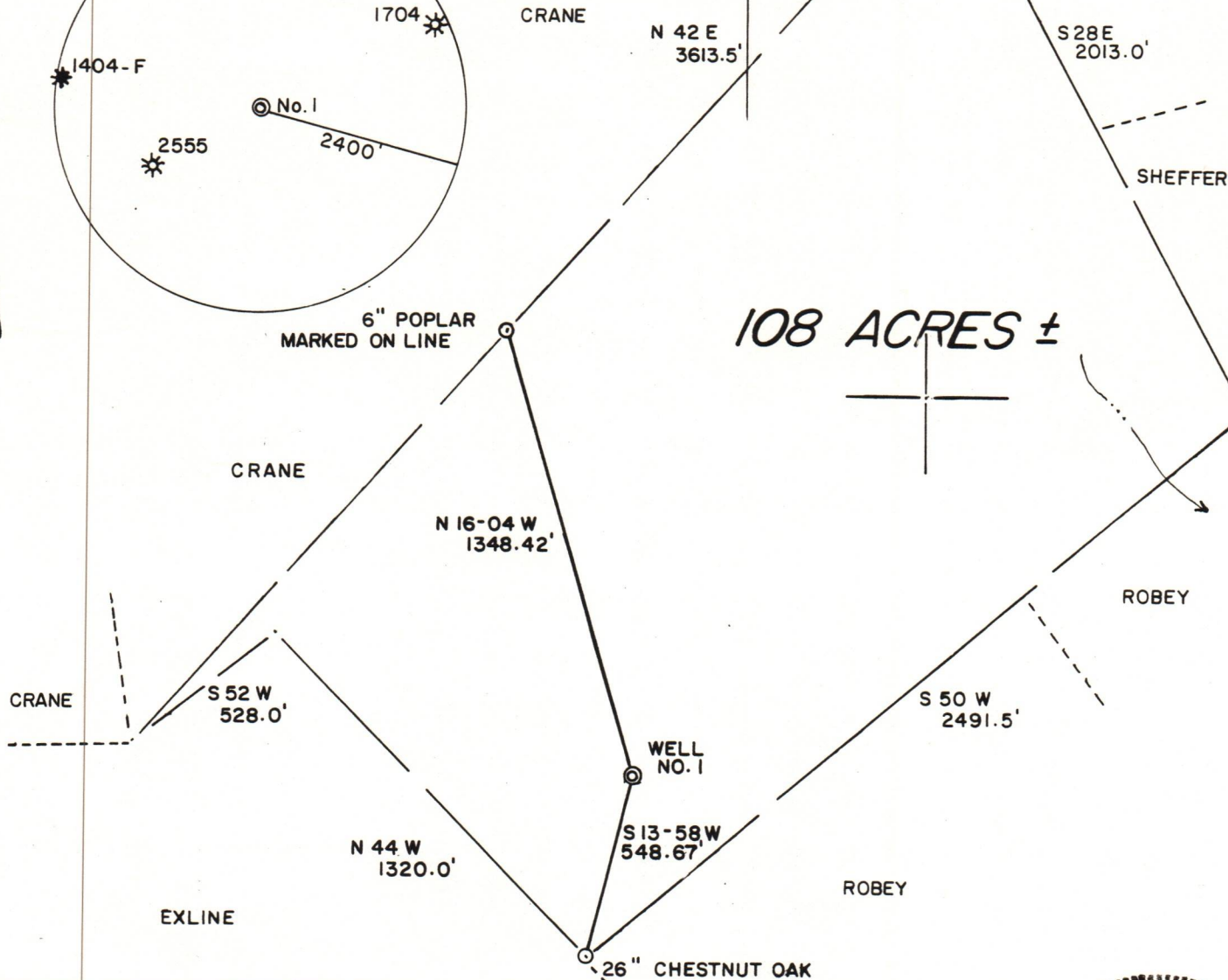
04/19/2024

6/3/82
**CRANE "A"
 WELL NO. 1**

LATITUDE 39°10'00"



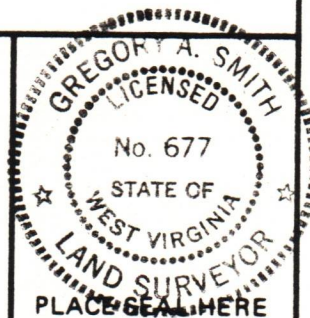
NORTH



LONGITUDE 80°57'30"

FILE NO. 6-55
 DRAWING NO. _____
 SCALE 1"=500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB
 ELEV. 1275'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) Gregory A. Smith
 R.P.E. _____ L.L.S. 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE MAY 26, 1982
 OPERATOR'S WELL NO. 1
 API WELL NO. _____
47 - 085 - 5680
 STATE COUNTY PERMIT

**STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION**

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1173 WATER SHED WOLFPEN RUN
 DISTRICT UNION COUNTY RITCHIE
 QUADRANGLE PULLMAN 7.5'

SURFACE OWNER WALTER C. CRANE ACREAGE 108
 OIL & GAS ROYALTY OWNER WALTER A. CRANE HEIRS LEASE ACREAGE 108
 LEASE NO. _____

04/19/2024

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ELK ESTIMATED DEPTH 5350'
 WELL OPERATOR RIMROCK PRODUCTION CORP. DESIGNATED AGENT ROBERT L. MURDOCK
 ADDRESS 4424 B" EMERSON AVENUE ADDRESS 4424 "B" EMERSON AVENUE
PARKERSBURG, W.V. 26101 PARKERSBURG, W.V. 26101