

(Reverse)

(Revised 3-81)

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt

Address Edens Fork, WV

GEOLOGICAL TARGET FORMATION Alexander Shale

Estimated depth of completed well 5000 feet. Rotary X / Cable tools /

Approximate water strata depths: Fresh, 200 feet; salt, 2050 feet.

Approximate coal seam depths: None

Is coal being mined in this area: Yes / No X /

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For Drill-ling, Left in Well), CEMENT FILL (UP OR SACKS, Cubic ft.), PACKERS (Kinds, Sizes, Depths set, Perforations: Top Bottom)

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 5-21-83.
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:

W A I V E R

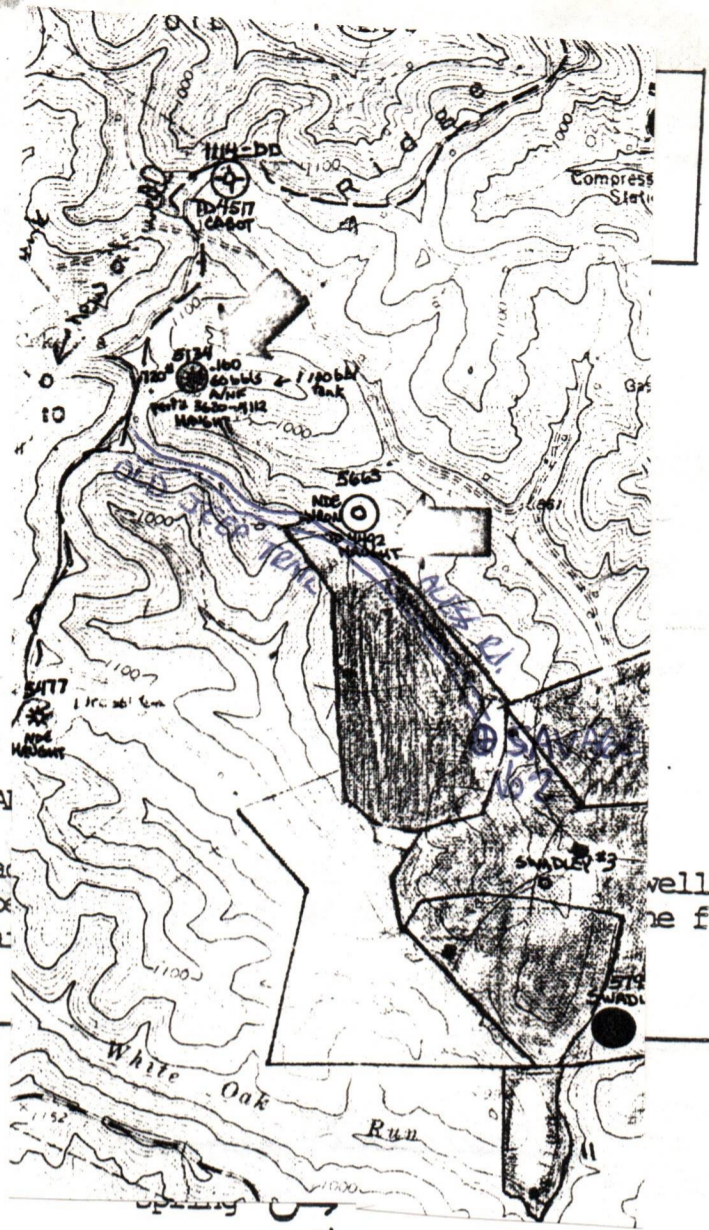
The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists in the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at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

Date: , 19 .

By: [Signature]

Its:

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE HARRISVILLE (7.5')



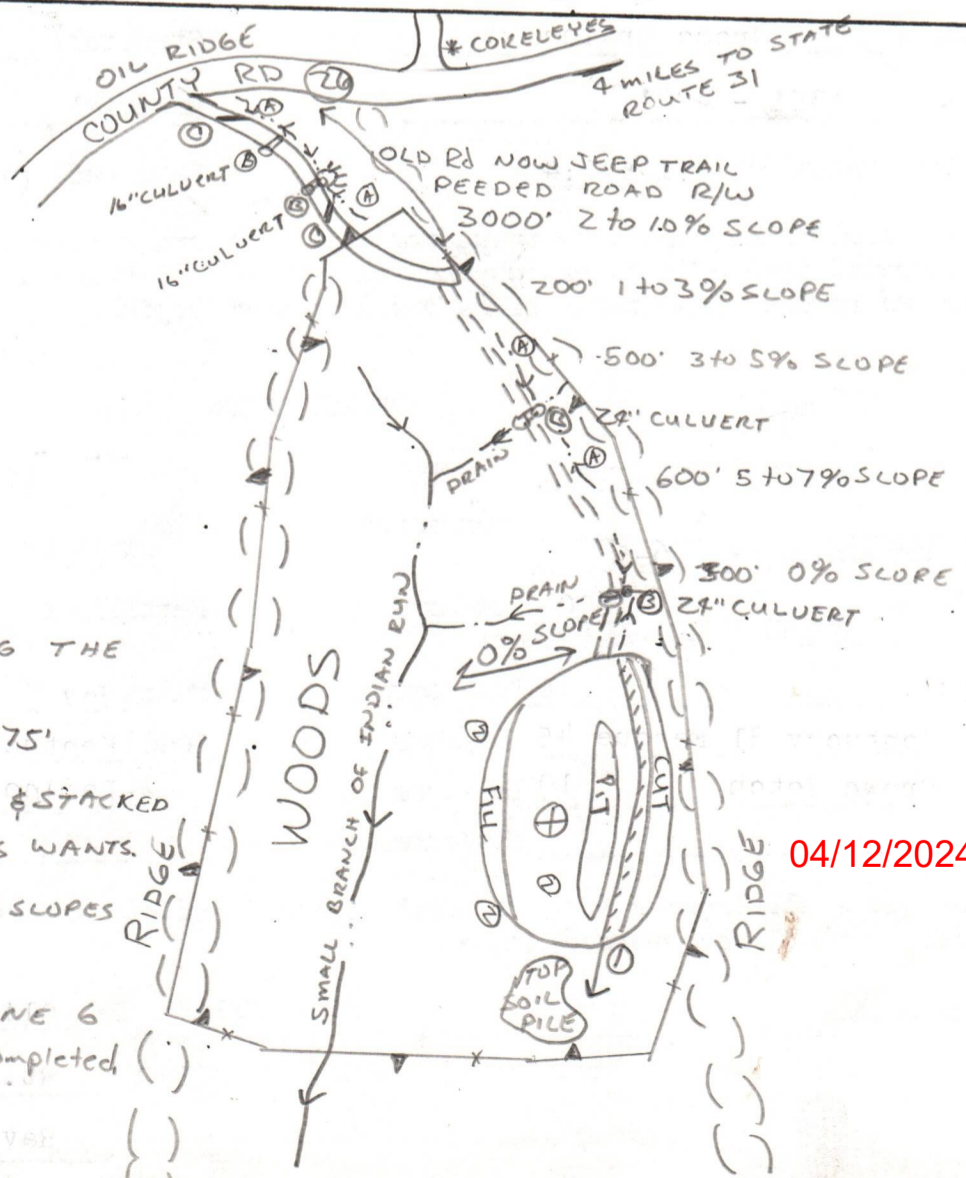
WELL SITE PLAN

Sketch to include well location, existing and planned drilling pits and necessary structures numbered. Part of this plan. Include all natural drainage features.

LEGEND

- Property boundary ————
- Road = = = = =
- Existing fence — x — x —
- Planned fence — / — / —
- Stream ~~~~~
- Open ditch ————>

- Wet spot ☿
- Building ■
- Drain pipe —○—○—○—>
- Waterway <—≡≡≡≡



LOCATION

1. WOOD LAND ON TOP ALONG THE RIDGE 0 to 2% SLOPE
2. SIZE OF LOCATION 125' X 175'
3. ALL TIMBER WILL BE CUT & STACKED ACCORDING TO LAND OWNERS WANTS.
4. ACCESS RD. WILL HAVE SIDESLOPES & CROSS DRAINS.
5. RECLAMATION WILL BE DONE 6 MONTHS AFTER WELL IS COMPLETED.

04/12/2024



IV-9
(Rev 8-81)

DATE Sept. 15, 1982

WELL NO. Savage No. 2

State of West Virginia

API NO. 47-085-5896

Department of Mines

Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Wayman Buchanan

DESIGNATED AGENT Jim P. Morris

Address San Antonio, Texas

Address Charleston, WV

Telephone 512-223-3897

Telephone 345-6631

LANDOWNER M. Crowley

SOIL CONS. DISTRICT Little Kanawha

Revegetation to be carried out by Unknown Contractor (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 9-17-82

(Date)

Jarrett Newlon
(SCD Agent)

ACCESS ROAD

LOCATION

Structure Drainage Ditch (A)

Structure Diversion Ditch (1)

Spacing _____

Material Earthen

Page Ref. Manual 2:12

Page Ref. Manual 2:12

Structure Culvert (B)

Structure _____ (2)

Spacing 12" Min-30" Mas I. D.

Material Straw

Page Ref. Manual 2:7 & 2:8

Page Ref. Manual 3:6 & 3:7

Structure Cross Drains (C)

Structure **RECEIVED**

Spacing 135' - 400'

Material _____

Page Ref. Manual 2:1 & 2:4

Page Ref. Manual _____
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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

Treatment Area II

Lime 3 Tons/acre
or correct to pH 6-5

Lime 3 Tons/acre
or correct to pH 6-5

Fertilizer 600 lbs/acre
(10-20-20 or equivalent)

Fertilizer 600 lbs/acre
(10-20-20 or equivalent)

Mulch Hay 2 Tons/acre

Mulch Hay 2 Tons/acre

Seed* Kentucky 31 Fescue 45 lbs/acre

Seed* Kentucky 31 Fescue 45 lbs/acre

Crown Vetch 10 lbs/acre

Ladino Clover 5 lbs/acre

_____ lbs/acre

04/12/2024 acre

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

PLAN PREPARED BY Olin Shockey

ADDRESS Rt. 1, Box 139-B

Ravenswood, WV

PHONE NO. 304-273-2246

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



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

a-10
R-5896

Yes ___ / No X / The right to extract, produce or market the oil or gas is based upon a lease or leases or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil and gas so extracted, produced or marketed.

If the answer to this question is yes, you may use this affidavit.

RECEIVED

SEP 20 1982

AFFIDAVIT

OIL AND GAS DIVISION
 WV DEPARTMENT OF MINES

I, _____ (the above designated owner or operator, or authorized representative thereof), after being duly sworn, do depose and say that the undersigned is authorized by the owner of the working interest in the well to state that it shall tender to the owner of the oil and gas in place not less than one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, all such oil or gas to be extracted, produced or marketed from the well

Signed: _____

Taken, subscribed and sworn to before me this _____ day of _____, 19__.

Signed: _____

My Commission Expires: _____

04/12/2024

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

Perforated 30 holes from 4473 to 5092 Ft.
 Treated and Fractured with 250 gal. 15% HCL and 1,000,000 scf N₂.
 Avg. breakdown 2275 psi
 Perforated 28 holes from 3879 to 4262 feet
 Treated and fractured with 750 gal. 15% HCL and 1,000,000 scf N₂.
 Avg. breakdown 2300 psi
 Perforated 27 holes from 3431 to 3806 feet
 Treated and fractured with 750 gal. 15% HCL and 1,000,000 scf N₂.
 Avg. breakdown 2166 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fra and salt water, coal, oil and g
Sand & Shale			0	608	
Sand			608	632	
Shale			632	678	
Sand			678	734	
Shale			734	765	
Sand			765	802	
Shale			802	930	
Sand & Shale			930	1093	
Sand			1093	1110	
Shale			1110	1205	
Sand			1205	1218	
Shale			1218	1260	
Sand			1260	1271	
Sand & Shale			1271	1553	
Sand			1553	1617	
Shale			1617	1647	
Sand			1647	1720	
Shale			1720	1815	
Sand			1815	1856	
Shale			1856	1900	
Sand			1900	1990	
Big Lime			1990	2060	
Injun			2060	2131	
Pocono Shale			2131	2472	
Sunbury Shale			2472	2492	
Berea Siltstone			2492	2508	
Shale			2508	2600	
Siltstone			2600	2632	
Shale			2632	2770	
Siltstone			2770	2820	
Shale			2820	2877	
Siltstone			2877	2890	
Shale			2890	3876	
Siltstone			3876	3918	
Shale			3918	4188	
Siltstone			4188	4207	
Shale			4207	4234	
Siltstone			4234	4263	
Shale			4263	4522	
Siltstone			4522	4540	
Shale			4540	5121	Sl. temp. show @ 4520-4540 (At 4540 separate sets as necessary)

Wayman W. Buchanan
 Well Operator

By: Guy Wightman
 Date: October 29, 1982

04/12/2024

Standard 1.1011 provides as follows:
 "The term 'log' or 'well log' shall mean a systematic
 geological record of all formations, including
 all encountered in the drilling of a well."



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IV-35
(Rev 8-81)

MAR 21 1983

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date October 29, 1982
Operator's
Well No. Savage #2
Farm Christine Savage, e
API No. 47 - 085 - 5896
5896

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

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

LOCATION: Elevation: 1061.75 Watershed Indian Run
District: Murphy County Ritchie Quadrangle Harrisville

COMPANY Wayman W. Buchanan

ADDRESS 444 Petroleum Commerce Bldg.
San Antonio, Texas 78205

DESIGNATED AGENT Jim P. Morris

ADDRESS 401 Peoples Building
Charleston, WV 25301

SURFACE OWNER Christine C. Savage, etal

ADDRESS 9478 West Avenue
Cincinnati, Ohio 45242

MINERAL RIGHTS OWNER Same as above

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK Samuel

ADDRESS P. O. Box 66
N. Hersman Smithville, WV 26178

PERMIT ISSUED 9/21/82

DRILLING COMMENCED 10/18/82

DRILLING COMPLETED 10/25/82

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.			
13-10"			
9 5/8		362	Surf.
8 5/8			
7		2322	Surf.
5 1/2			
4 1/2		5103	3403'
3			fill up
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5000 feet

Depth of completed well 5121 feet Rotary X / Cable Tools _____

Water strata depth: Fresh 120 feet; Salt 2120 feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3431-5092 feet

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

Final open flow 137 Mcf/d Final open flow 16 Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure N/A psig (surface measurement) after _____ 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

04/12/2024

717-5896

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

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INSPECTOR'S WELL REPORT

OCT 22 1982

Permit No. 85-5896

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

Company Wayman W. Buchanan

Address _____

Farm Christine C. Savage ET AL

Well No. Savage # 2

District Murphy County Ritchie

Drilling commenced 10-19-82

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: Visit - check out road - Location + Pit - O.K.

10-19-82
DATE

Samuel N. Heisman 04/12/2024
DISTRICT WELL INSPECTOR

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

RECEIVED
OCT 28 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 85-5896

Oil or Gas Well
(KIND)

Company Wayman W. Buchanan

Address _____

Farm Christine C. Savage ET AL

Well No. Savage # 2

District Murphy County Pitkin

Drilling commenced 10-19-82

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 Drilled with Fluid _____ feet _____ feet

Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			Kind of Packer
16			
13			Size of
10			
8 1/4			Depth set
6 5/8			
5 3/16			Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			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 C.W. Price - Fredrick Watring - Elverson Don - Ed Huffman

Remarks: Clint Hurt Assoc. Rig # 2 tool Pusher Rodney Poston

Ran 362 foot of 9 5/8 casing
Halliburton ran 170 sacks cement
Plug Down 8: A.M.

10-20-82
DATE

Samuel W. Hersman 04/12/2024
DISTRICT WELL INSPECTOR

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

RECEIVED
OCT 28 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 85-5896

Oil or Gas Well _____
(KIND)

Company Wayman W. Buchanan

Address _____

Farm Christine C. Savage ET. AL.

Well No. Savage # 2

District Murphy County Pitkin

Drilling commenced 10-19-82

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 3/8			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 C. W. Price / Fredrick Watring / Querson Con / Ed Huffman

Remarks: Clint Hurt Assoc. Inc. Rig # 2 tool Pusher - Rodney Popton

Return visit to check on Pit - Pit OK

1750 foot deep at time of visit

10-21-82
DATE

Samuel W. Hershman 04/12/2024
DISTRICT WELL INSPECTOR

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

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JUL 18 1983

OIL & GAS DIVISION
DEPT. OF MINES

Final
INSPECTOR'S WELL REPORT

Permit No. 47 085 5894

Oil or Gas Well _____
(KIND)

Company Wayman W Buchanan
 Address San Antonio Texas 78205
 Farm Savage
 Well No. 2
 District murphy 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 3/8			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: 7 14 83 no Reclamation - water hole at end of location

Cannot Release

7-14-83
DATE

Jerry Teph...
04/12/2024
DISTRICT WELL INSPECTOR



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

WALTER N. MILLER
DIRECTOR

THEODORE M. STREIT
ADMINISTRATOR

September 6, 1983

Wayman W. Buchanan
c/o Leroy Hopkins
P. O. Box 106
Kenna, W. Va. 25248

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-5688	Jeffrey L. Moats, et al, #1	Grant
RIT-5701	Gene Metz/Woodrow Metz, #1	Grant
RIT-5799	Claude W. Swadley, #1	Murphy
RIT-5800	Claude W. Swadley, #2	Murphy
RIT-5870	James F. Beckett, et al, #1	Murphy
RIT-5895	Christine C. Savage, #1	Murphy
RIT-5896	Christine C. Savage, et al, #2	Murphy
RIT-6123	Ruben Hinton, et al, #1	Murphy

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.....

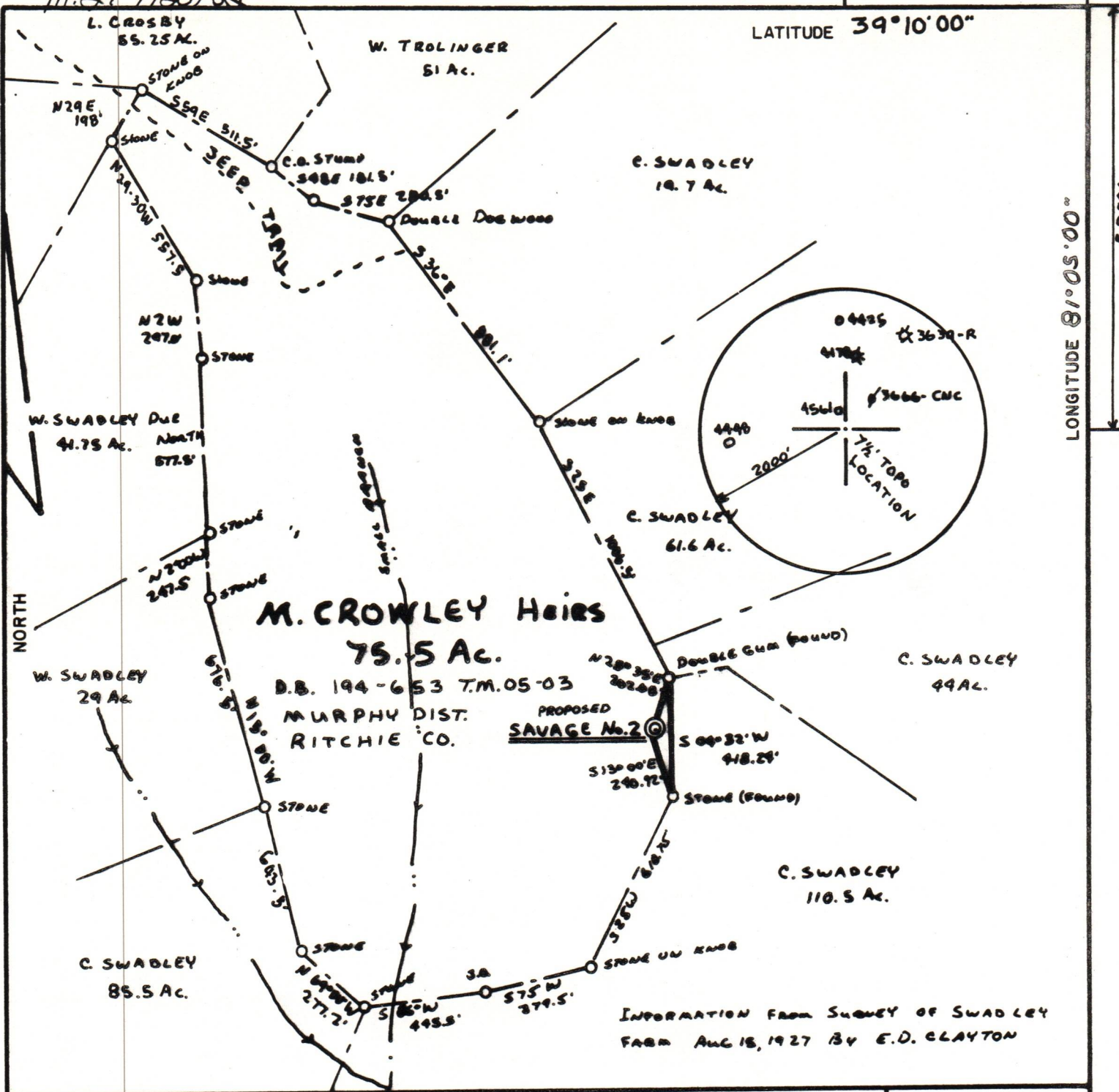
Very truly yours,

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

04/12/2024

M.L. 9/20/82

3,400'



M. CROWLEY Heirs
75.5 Ac.

D.B. 194-653 T.M.05-03
MURPHY DIST.
RITCHIE CO.

PROPOSED
SAVAGE No. 2

INFORMATION FROM SURVEY OF SWADLEY
FARM AUG 18, 1927 BY E.D. CLAYTON

FILE NO. F.B. 35
 DRAWING NO. 82109
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TOP OF RIDGE 1113'
N.W. OF LOCATION

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) Wayman Buchanan
 R.E. _____ L.L.S. 434

PLACE SEAL HERE

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



DATE 9-18, 1982
 OPERATOR'S WELL NO. SAVAGE No. 2
 API WELL NO. 47-085-5896
 STATE COUNTY PERMIT

Department of Mines
 Oil & Gas Division

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 1061.75' WATER SHED INDIAN RUN
 DISTRICT MURPHY COUNTY RITCHIE
 QUADRANGLE HARRISVILLE (7.5')
 SURFACE OWNER CHRISTINE C. SAVAGE ET AL. ACREAGE 75.5 04/12/2024
 OIL & GAS ROYALTY OWNER CHRISTINE C. SAVAGE ET AL. LEASE ACREAGE 75.5
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 ALEXANDER ESTIMATED DEPTH 5000'
 WELL OPERATOR WAYMAN BUCHANAN DESIGNATED AGENT JIM P. MORRIS
 ADDRESS SAN ANTONIO, TEXAS ADDRESS CHARLESTON, W. VA.