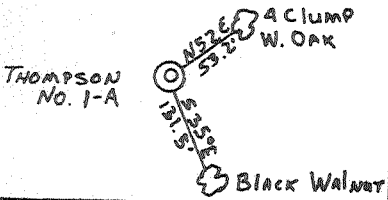


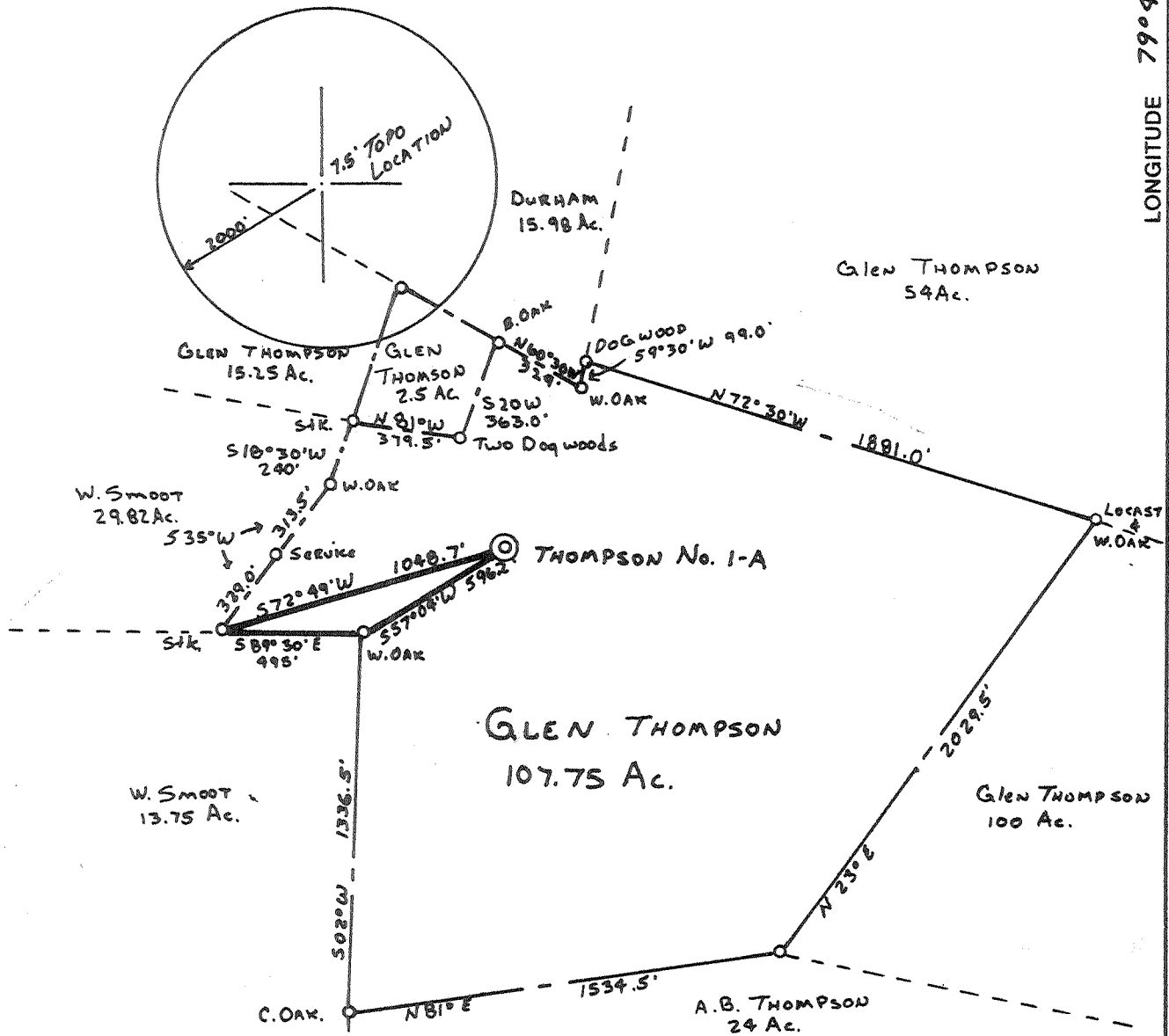
REFERENCE POINTS



Janice
2/22/93
9/2/93

LATITUDE 38° 57' 30"

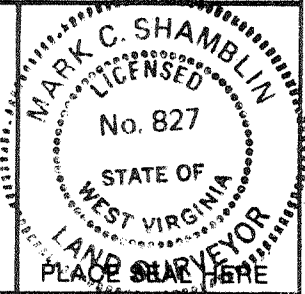
LONGITUDE 79° 47' 30"



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 93
DRAWING NO. 93001
SCALE 1" = 600
MINIMUM DEGREE OF ACCURACY 1 : 200
PROVEN SOURCE OF ELEVATION ROAD INTERSECTION
EL. 1989' WEST 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 ENERGY.
(SIGNED) Mark C. Shamblin
R.P.E. _____ L.L.S. 827



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE 1-22, 1993
OPERATOR'S WELL NO. THOMPSON 1-A
API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___

47 - 083 - 1121-P
STATE COUNTY PERMIT

LOCATION: ELEVATION 2182.5' WATER SHED CRAVENS RUN
DISTRICT LEADSVILLE COUNTY RANDOLPH
QUADRANGLE ELKINS (7.5')

SURFACE OWNER GLEN THOMPSON ACREAGE 107.75
OIL & GAS ROYALTY OWNER GLEN THOMPSON LEASE ACREAGE 309.00
LEASE NO. 1

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

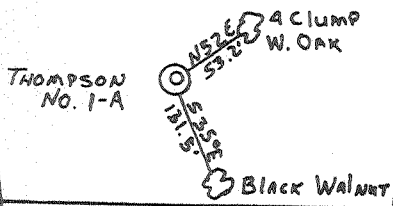
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION ORISKANY SAND ESTIMATED DEPTH 2800'
WELL OPERATOR HAROLD C. OGDEN INC. DESIGNATED AGENT HAROLD C. OGDEN
ADDRESS P.O. Box 8 ADDRESS P.O. Box 8
ELKINS, W.V. 26241 ELKINS, W.V. 26241 PHONE 636-5638

SEP 3 1993

COUNTY NAME RAND
PERMIT 1121

DEEP well

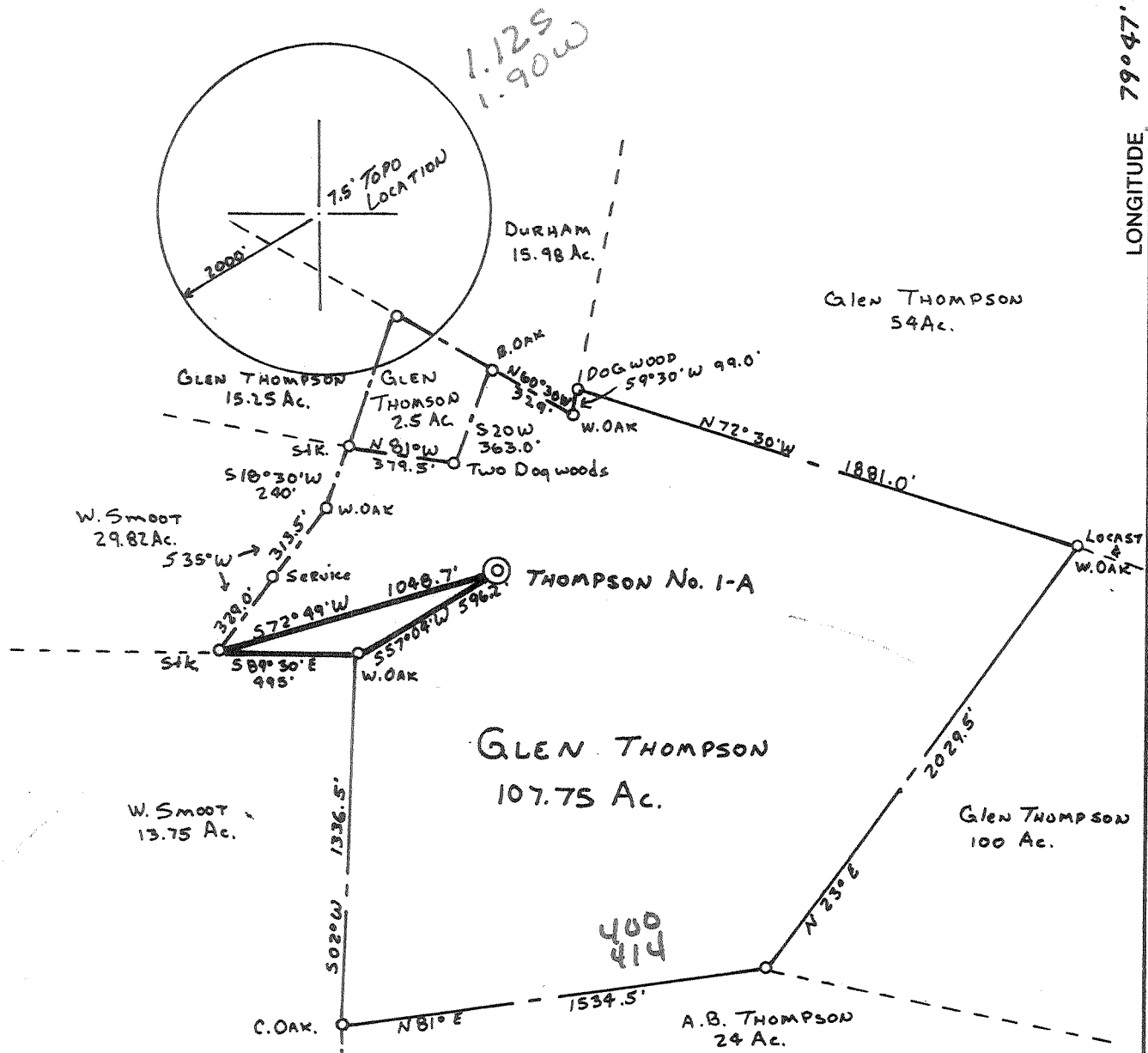
REFERENCE POINTS



LATITUDE 38° 57' 30"

LONGITUDE 79° 47' 30"

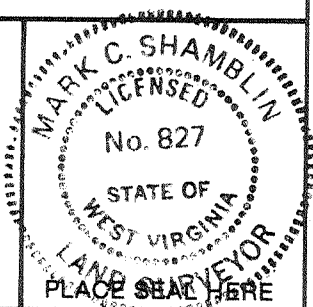
NORTH



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 93
 DRAWING NO. 93001
 SCALE 1" = 600
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION
EL. 1989' West 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 ENERGY.
 (SIGNED) Mark C. Shamblin
 R.P.E. _____ L.L.S. 827



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE 1-22, 1993
 OPERATOR'S WELL NO. THOMPSON 1-A
 API WELL NO. 47-083-1121
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 2182.5' WATERSHED Cravens Run
 DISTRICT Leadsville 4 COUNTY RANDOLPH
 QUADRANGLE Elkins (7.5')
 SURFACE OWNER GLEN THOMPSON ACREAGE 107.75
 OIL & GAS ROYALTY OWNER GLEN THOMPSON LEASE ACREAGE 309.00
 LEASE NO. 1
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY SAND ESTIMATED DEPTH 2800'
 WELL OPERATOR HAROLD C. OGDEN INC. DESIGNATED AGENT HAROLD C. OGDEN
 ADDRESS P.O. Box 8 ADDRESS P.O. Box 8
Elkins, W.V. 26241 Elkins, W.V. 26241 PHONE 636-5638

COUNTY NAME PERMIT

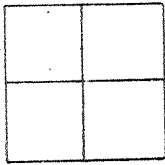
STRIP LOG

STATE WV PERMIT NO. 47-083-1121 COUNTY Randolph
 DISTRICT _____

QUAD _____ FARM Thompson WELL NO. 1

COMPANY Harold Ogdon, Inc LOGGED BY RJ Yedlosky DATE May-June '93

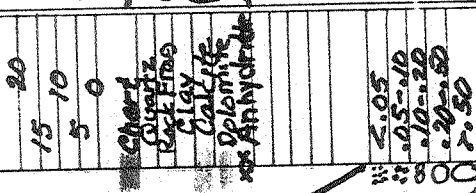
ELEVATION 2182 TD 3071 B.H. FORM. Oriskany



Est. Porosity

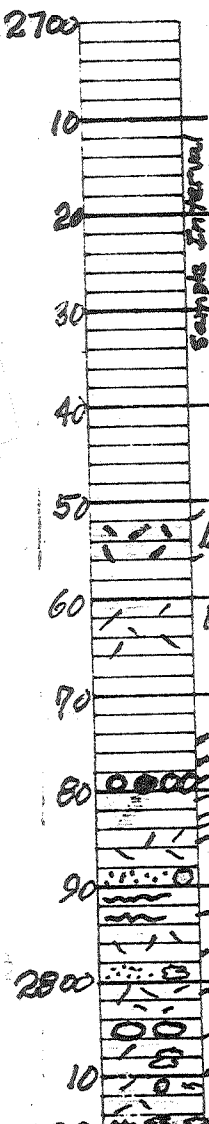
Composition

Estimated Gamma Ray
Grain Size mm



Remarks

CABLE TOOL SAMPLES



Depth (ft)	Grain Size (mm)	Gamma Ray
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		
480		
490		
500		
510		
520		
530		
540		
550		
560		
570		
580		
590		
600		
610		
620		
630		
640		
650		
660		
670		
680		
690		
700		
710		
720		
730		
740		
750		
760		
770		
780		
790		
800		
810		
820		
830		
840		
850		
860		
870		
880		
890		
900		
910		
920		
930		
940		
950		
960		
970		
980		
990		
1000		

whit to lt. gry cht; opaque to translucent w/ whit spiculation frag.; clay filled micro-fractures

lt gry spiculation cht; semi-transparent; micro-fract filled w/ ash like clay

[LONG SAMPLE INTERVAL]
probable missing spls

v. fine spl size (hard) opalescent cht; clear spic. cht; to granular cht.; sm. 2nd pyrt. kl. brn. sh inclusions
brn-gry impure cht
semi-clear impurecht w spicules

v.f. grain cht w/ brn. sh clasts
clear spic. cht w gry siliceous alt. laminae

clear spic. cht; micro-fracs filled w clay & cht. to impure gry cht w/ coarse clay clasts, gry tan impure cht to clear spic. cht

clear spic. cht to coarse grain impure cht; micro fr filled w ash clay
smoky wht cht w spic & few clay clasts
few micro frags filled w calc.

smoky spic. cht sil glauconite 3% w silt interbed
clear spic. cht. to tan opaq. cht; micro frags fill. w c
to network frag. cht. con. w/ calc



80	20
80	20
60	1000
99	
65	
60	3000
2900	
10	
20	
30	
40	
50	67013155 VL
50	20 5000
50	40 1000
50	72 58 20 2500 20 25
50	20 10
60	70 30 5500 50
70	88 12
70	20 10
70	58 200
70	58 200
80	60 1000
80	72 300
90	35 1500
3000	79 100
3000	79 100
3000	30 100
3000	75 500
3000	65 700
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3000	50 20 100
3000	50 25 100
3000	50 20 100
3000	30 20 100
20	70 100 5
30	55 500
30	80 100

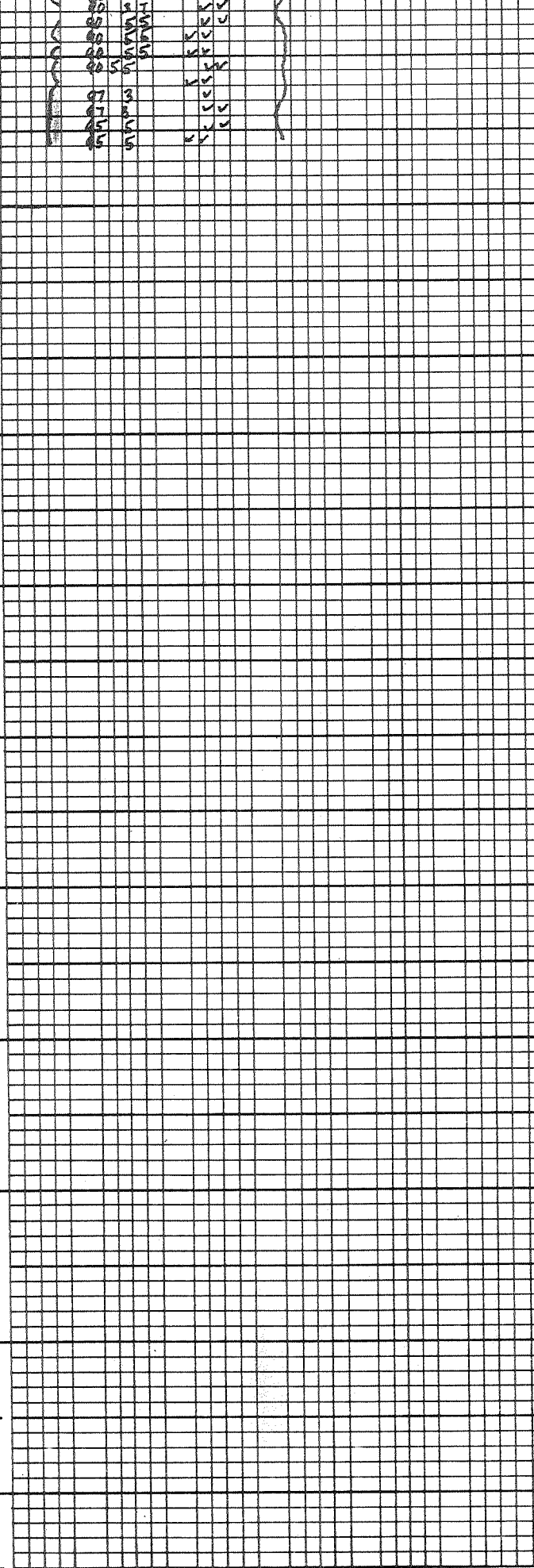
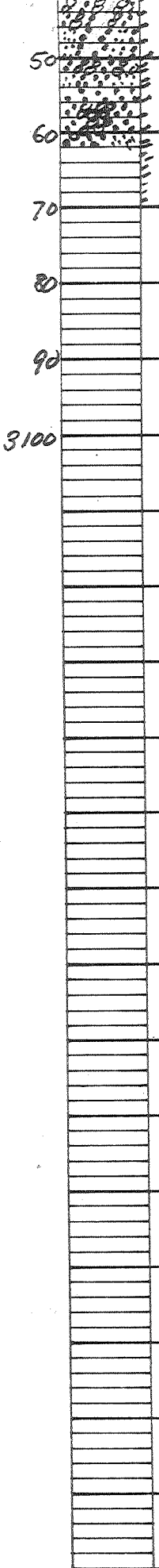
v. lt gray spec chert to impure argill chert w/ clay clasts
 chert spec to gray glass / chert mic. fine clay fol
 (lt gray - drk gray v.f. silty glass. chert
 gray v.f. silty glass. chert to drk gray sil. silt
 gray silty chert to med spec. lt gray v.f. chert
 gray v.f. grain spec. chert to lt gray v.f. grain chert
 v. lt gray v.f. grain chert to gray spec. chert
 gray impure silty chert to drk gray sil. silt.
 gray impure argill chert w/ drk gray sh. lam

spils delivered by Harold 5-18-93
 drk. gray. organic non-calc. sh.

gray organic sli pyrit. sh. Tr esse rim
 (gray med dol (fine fill?))
 gray - v. drk gray organic sh - sli pyritic
 drk gray organic sh, pyritic (some rod
 shaped pyrit (spicules?))
 gray to drk gray organic sli pyritic sh
 few cone pyrit aggregates & cone calc xls.

v.f. grain impure calc ss TOP ORISKANY gray argill
 gray silty argill. ls
 gray argill calc v.f. sd
 gray impure calc sil v.f.
 lt gray med to coarse calc. sd to poor sort congl.
 lt gray calc med coarse ss - some blk interzona mat
 (dead oil?)
 whit congl. calc. foss. ss

lt gray poor sort calc sd
 lt gray " " " some sh grains
 med congl. sd low calc. pass 2% @
 poor sort w/ sil. calc. spec. in
 poor sort. Ti sil med sd in clay stks - calc grains
 & con; remoted sh. grains.
 poor sort med. sd. w/ sh. calc. grains & con.
 lt gray calc. poor sort sd w/ foss. fauna & grain
 poor sort. Calc sd w/ calc grains & drk gray sh.
 grains; gray organic clay laminae
 coarse but poor sort - Ti calc sd; low calc
 dirty poor sort v. calc sd w/ abraded cl. lam
 any silty calc. f. poor sort Ti sd w/ gray silt lam.
 clay congl. calc. to congl. foss calc sd in 19a @
 in non-calc. zone
 Silty sd low calc poor sort - Ti sd
 one poor sort calc sd w/ silt sh stks
 dirtier (foss v. poor sort. sd)
 clay poor sort less sd in
 med grain poor sort poor sort sd. Ti
 finer dirtier (foss v. sd)
 gray v.f. calc. foss sd w/ silt-clay laminae
 gray v.f. calc. sd w/ silt zones
 v.f. sd poor sort inter bed w/ dirtier sd AA
 v.f. calc sd interbed w/ coarse foss sd w/ clay laminae
 v. calc poor sort sd
 med. non sort calc sd Ti



Med. f. sd w/ calc. com. & intergran clay. r. m. s.
 med. sd w/ dsk. gry. intergran clay; 1-2% ϕ
 finer sd
 AA
 Med. f. sd w/ blk organic clay? r. m. s. 1-2% ϕ
 Med. grain sd w/ trace ϕ 2-4% ϕ
 Med. blk. sd
 blk intergran mat 2-3% ϕ grading to
 Clean v. f. sd w 2-3% ϕ

OPERATOR Arnold Gordon WELL #/NAME LA Thompson DIST. Leadsville COUNTY Randolph STATE CV
 DRILLER 11 ELE. 2182 KB 2186 LOGGING CO. Allegheny DATE: 7/6/93

Chart

FORMATION	h	Dg	Pb	Np	Ind	T ^o	Rt/Rw	φ	Sw	Sg	So	φHSG	φHSO	NMCF/Ac	BOPA	Remarks
2730-33	3		0.58			87		7.5	45	55		0.05735				
2799-04	5		0.58		200		4256	3.0	52	52		0.075				29895
2800-04	4		0.58		252		5319	4.0	28	72		0.152				1.78 NMCF/Ac X
2808-11	3		0.58		180	88	3802	3.4	50	50		0.051				
2819-15	6		0.55		45		957	4.7	60	40						353, 386 SUR / 300 Ac.
DILLON																
2844-31	8		0.69	0.63	20	89	434	3.8	83	17						
2848-52	7		0.68	0.58	68	90	1478									
2858-59	4		0.57		58	90	1217	4.0	63	37						
3062-7			0.58													
@ 107 @ 84°																
2739-33	2		0.65	0.55		87										
2799-04	5		0.58		200		2857	3.0	60	40						
2800-04	4		0.55		252		3572	4.2	28	72						
2808-11	3		0.55		180	88	2727	3.5	52	48						
2819-25	6		0.55		45		681	5.0	70	30						
DILLON																
2909-31	2		0.64	0.63	20		303	2.0	7	62						
2948-50	7		0.58		68		1030	3.7	75	25						
3055-59	9		0.57		58		518	4.8	68	32						

*Calculated at 0:46 psi/ft unless otherwise indicated

@ 150' per ppm

Water Sample @ 600'

Rm 107 @ 84°

95:22:00pm



WR-35

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date July 2 / 93
Operator's
Well No. Thompson # 1A
Farm Glen Thompson
API No. 47 - 83 - 1121

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

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

LOCATION: Elevation: 2182 Watershed Cravens Run
District: Leadsville County Randolph Quadrangle Elkins

COMPANY Harold C. Ogden

ADDRESS P.O. Box 8 Elkins, WV 26241

DESIGNATED AGENT Harold Ogden

ADDRESS P.O. Box 8 Elkins, WV 26241

SURFACE OWNER Glen Thompson

ADDRESS Rt # 2 Box 186 Elkins, WV

MINERAL RIGHTS OWNER Glen Thompson

ADDRESS Rt # 2 Box 186 Elkins WV

OIL AND GAS INSPECTOR FOR THIS WORK Phillip

Tracy ADDRESS Rt 2 Box 37A Montrose

PERMIT ISSUED 2/22/93

DRILLING COMMENCED 2/22/93

DRILLING COMPLETED 7/2/93

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON 7/2/93

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	565	565	Surface
7	2770	1670	1670
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Chert Oriskany Depth 2745 feet

Depth of completed well 3070 feet Rotary ___ / Cable Tools X

Water strata depth: Fresh 200 feet; Salt 3000 feet

Coal seam depths: None Is coal being mined in the area? ___

OPEN FLOW DATA

Producing formation None Pay zone depth 2745-3070 feet

Gas: Initial open flow None Sho None Mcf/d Oil: Initial open flow None Bbl/d

Final open flow None Mcf/d Final open flow None Bbl/d

Time of open flow between initial and final tests ___ hours

Static rock pressure ___ 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

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

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Soil			0	5	
Sandstone			5	15	
Shale			15	100	
Lime			100	150	
Shale			150	200	
Sand			200	225	
Shale & Lime			225	2450	
Marsillis			2450	2480	
Shale			2480	2745	
Chert			2745	2900	
Need More Shale			2900	2930	
Oriskany			2930	3070 TD	

*Dry hole
Verbal by Phil Tracy*

(Attach separate sheets as necessary)

Harold C. Ogden
Well Operator
By: Harold C. Ogden
Date: 7-22-93

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic

083-1121
 issued 2/22/93
 Page 2/5 of 4.2.4

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
 WELL WORK PERMIT APPLICATION

- 1) Well Operator: Harold C. Order Inc. 4063 35330 (4) 335
- 2) Operator's Well Number: Thompson #1A 3) Elevation: 2192.5
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Oriskany Sand 475
- 6) Proposed Total Depth: 2800 feet
- 7) Approximate fresh water strata depths: 100' 250'
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work:
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4"				20'	
Fresh Water	9 5/8"				500'	38 OSP 18 11
Coal						38 OSP 18 11
Intermediate						
Production	4 1/2"				2600'	38 OSP 18 11 110 sks.
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
 (Type)

16845

4855/3

FEB 17 1993
Permitting
Office of Oil & Gas

1) Date: January 22, 1993
2) Operator's well number
Thompson No. 1A
3) API Well No: 47 - 083-1121
State - County: Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Glen H. Thompson
Address Route 1
Elkins WV 26241
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Phillip Tracy
Address P.O. Box 37-A
Montrose, WV 26283
Telephone (304) - 636-8798

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
 X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties, by:
 Personal Service (Affidavit attached)
 X Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Harold C. Ogden Inc.
By: [Signature]
Its: Owner-President
Address P.O. Box 8
Elkins WV 26241
Telephone 304-636-5638

Subscribed and sworn before me this 22 day of January, 1993
Olin Shockley
My commission expires April 1, 1993 Notary Public

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: THOMPSON, GLENN H. Operator Well No.: THOMPSON #1A

LOCATION: Elevation: 2,182.50 Quadrangle: ELKINS
District: LEADSVILLE County: RANDOLPH
Latitude: 5900 Feet South of 38 Deg. 57 Min. 30 Sec.
Longitude 9950 Feet West of 79 Deg. 47 Min. 30 Sec.

Well Type: OIL _____ GAS

Company: Harold C Ogden inc Coal Operator NONE
or Owner _____

Agent: Harold C Ogden Coal Operator NONE
or Owner _____

Permit Issued: 09/02/93

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Randolph ss:

Harold C Ogden and Bobby Joe Pardon being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Phil Tracy Oil and Gas Inspector representing the Director, say that said work was commenced on the 2 day of JULY, 1993, and that the well was plugged and filled in the following manner:

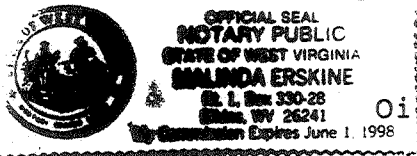
TYPE	FROM	TO	PIPE REMOVED	LEFT
CEMENT	3070	2700		858 560
	1170	1070		
	660	560	7" 1100'	7" 1670
	50	0		
6 1/2"	Eol Between All Cement			9/23/93

Description of monument: 8 5/8 3FT Above Ground
and that the work of plugging and filling said well was completed on the 2 day of JULY, 1993.

And further deponents saith not.

Harold C Ogden

Sworn and subscribe before me this 13 day of September, 1993
My commission expires: June 1, 1998



Malinda Erskine
Notary Public

Oil and Gas Inspector:

Phillip Tracy
SEP 24 1993