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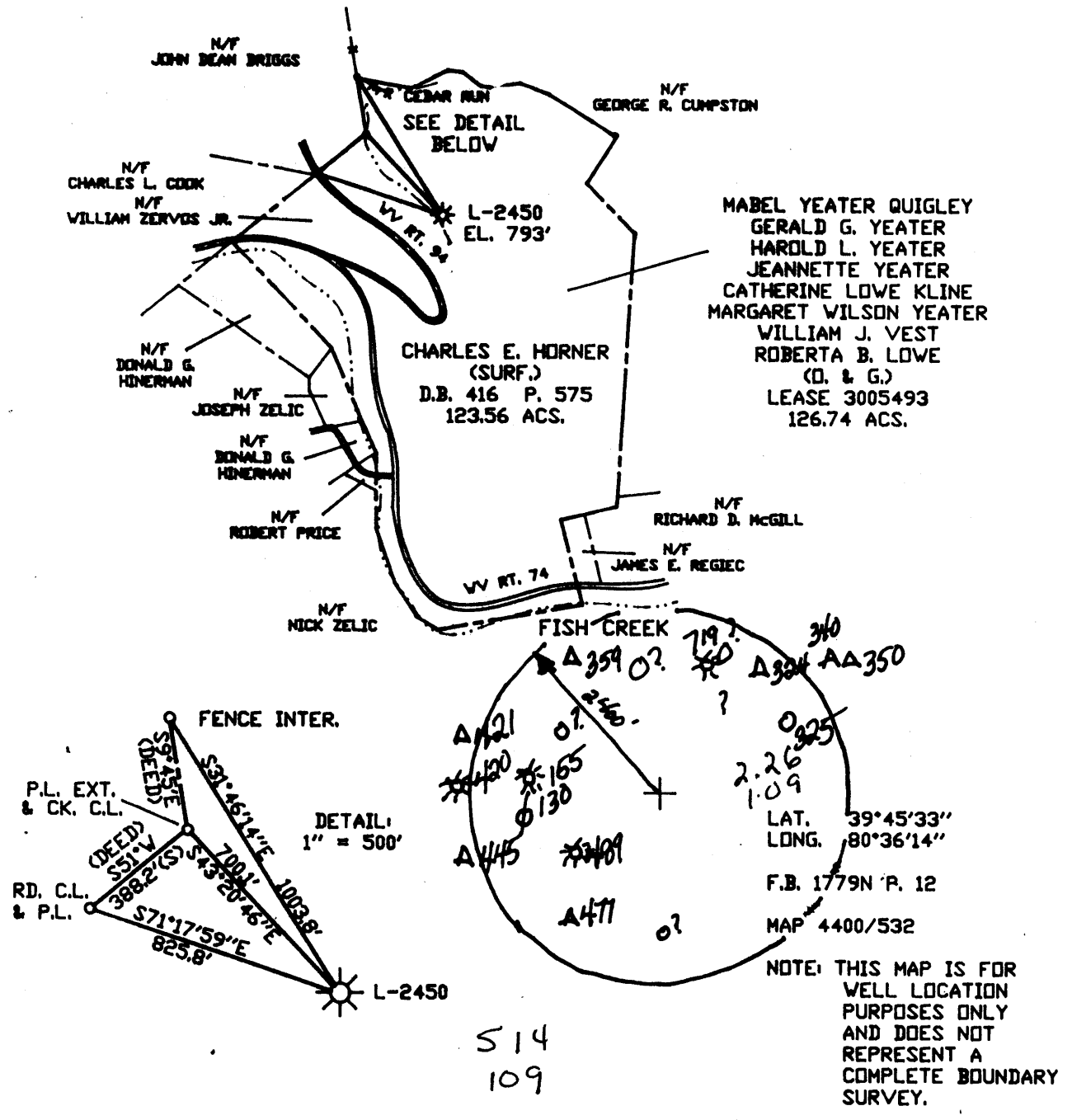
5880'

LATITUDE 39°47'30"

Jamil
6/29/93

NORTH

LONGITUDE 80°35'00"



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION BM E127 770.09'

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) *Neil E. Ligon*
 R.P.E. _____ L.L.S. #945

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
OIL AND GAS DIVISION



DATE MARCH 4, 19 93
 OPERATOR'S WELL NO. 1-2450
 API WELL NO. 47-051-00606 F.

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 793' WATERSHED CEDAR RUN
 DISTRICT LIBERTY 4 COUNTY MARSHALL
 QUADRANGLE CAMERON, W.V. 30
 SURFACE OWNER CHARLES T. HORNER ACREAGE 123.56
 OIL & GAS ROYALTY OWNER SEE PLAT ABOVE LEASE ACREAGE 126.74
 LEASE NO. 3005493

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR COLUMBIA GAS TRANS. CORP. 125 DESIGNATED AGENT *Dick Cotter*

JUL 2 1993

FORM IV-6 (8-78)

COUNTY NAME PERMIT

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: HORNER, CHARLES & DELORSE Operator Well No.: L-2450

LOCATION: Elevation: 793.00 Quadrangle: CAMERON

District: LIBERTY County: MARSHALL
Latitude: 11870 Feet South of 39 Deg. 47Min. 30 Sec.
Longitude 5880 Feet West of 80 Deg. 35 Min. Sec.

Company: COLUMBIA GAS TRANSMISSION
1700 MaccORKLE AVENUE S.E.
CHARLESTON, WV 25314-0000

Agent: ROBERT C. WEIDNER

Inspector: RANDAL MICK
Permit Issued: 07/02/93
Well work Commenced: 11/11/93
Well work Completed: 3/4/94
Verbal Plugging _____
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 1824
Fresh water depths (ft) NOT
RECORDED BY DRILLER
Salt water depths (ft) NOT
RECORDED BY DRILLER
Is coal being mined in area (Y/N)? NO
Coal Depths (ft): PITTSBURGH COAL 449'-454'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 10 3/4" O.D.	194'	194'	177
8 5/8" O.D.	1044'	1044'	236
5 1/2" O.D.	1578'	1578'	354
3 1/2" O.D.	1825'	1825'	123

OPEN FLOW DATA

Producing formation BIG INJUN SAND Pay zone depth (ft) 1662
 2/23/94 → Gas: Initial open flow 489 MCF/d Oil: Initial open flow - Bbl/
 3/4/94 → Final open flow 2,180 MCF/d Final open flow - Bbl/
 Time of open flow between initial and final tests 96 Hour
 Static rock Pressure 380 psig (surface pressure) after 16 Hour

Second producing formation - Pay zone depth (ft) -
 Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/
 Final open flow - MCF/d Final open flow - Bbl/
 Time of open flow between initial and final tests - Hour
 Static rock Pressure - psig (surface pressure) after - Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WEL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: COLUMBIA GAS TRANSMISSION CORP.

By: Ronald A. Schoff
Date: July 6, 1994

JUL 10 1994

- 11/2/93 CLEANED OUT TO THE PLUGGED BACK TOTAL DEPTH AT 1825' G.L.
- 11/4/93 RAN 1825' G.L. OF 3 1/2" O.D. J-55, 9.2#/FT. TUBING AND HALLIBURTON CEMENTED IN PLACE WITH 100,000^{SKS}
- 11/5/93 INSTALLED A NEW 7" X 3 1/2", API 2000, NATIONAL-OILWELL FLANGED WELLHEAD, WITH 2-3 1/4", API 2000, BARTON GATE VALVES,
- 2/24/94 HITWELL SURVEYS PERFORATED THE 3 1/2" O.D. TUBING FROM 1662' TO 1672' AND FROM 1682' TO 1692' AT 4 SHOTS/FT.
- 3/1/94 HALLIBURTON FRACTURED THE BIG INJUN SAND WITH 500^{GAL} OF 15% HCL, 507^{BBL} OF GELLED WATER, 5,000# OF 80/100 SAND AND 25,000# OF 20/40 SAND.

FORMATION DEPTHS (FROM SERVICE COMPANY LOGS RUN BY HALLIBURTON LOGGING SERVICES ON 11/3/93):

<u>FORMATION</u>	<u>FROM</u>	<u>TO</u>
PITTSBURGH COAL	449'	454'
MURPHY SAND	565'	578'
BIG DUNKARD SAND	988'	1025'
MAXTON SAND	1487'	1512'
LOWER MAXTON SAND	1517'	1535'
BIG LIME	1546'	1572'
BIG INJUN SAND	1572'	
TOTAL DEPTH	-	1825'
PLUGGED BACK TO (3 1/2" FLOAT SHOE)	-	1824'

051-0606 - F
 Issued 07/02/93
 Page 1 of 1
 Expires 07/02/95

Permitting
 Office of Oil & Gas

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

- 1) Well Operator: COLUMBIA GAS TRANSMISSION CORP. 10450 (4) 278
- 2) Operator's Well Number: L-2450 3) Elevation: 793
- 4) Well type: (a) Oil / or Gas X /
 (b) If Gas: Production / Underground Storage X /
 Deep / Shallow X /
- 5) Proposed Target Formation(s): BIG INJUN SAND
- 6) Proposed Total Depth: 1833 feet
- 7) Approximate fresh water strata depths: 150' (EST.)
- 8) Approximate salt water depths: 850'
- 9) Approximate coal seam depths: 340-342', 440-446'
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: KILL WELL; CLEAN OUT TO 1833'; RUN AND CEMENT 3-1/2" TUBING THROUGH THE BIG INJUN SAND; PERFORATE AND FRACTURE WELL.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor		<i>Existing from well record</i>				
Fresh Water	10-3/4"	UNK.	32.75	195'	194'	150 SACKS
Coal	8-5/8"	UNK.	24	1050'	1044'	200 SACKS
Intermediate	5-1/2"	UNK.	17	1576'	1576'	300 SACKS
Production	3-1/2"	J	9.2	1592.4"	1833'	150 SACKS
Tubing						
Liners				<i>New Pipe to be run</i>		<i>305 SACKS !!</i>

PACKERS : Kind NONE
 Sizes
 Depths set

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

17436

00269/20
 11

RECORDED
 JUN 16 88
 Environmental Protection
 Permitting
 Office of Oil & Gas

Page 1 of 1
 Form WW2-A
 (09/87)
 File Copy

1) Date: MAY 13, 1993
 2) Operator's well number
L-2450
 3) API Well No: 47 - 051 - 00606-R-FRAC
 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 CHARLES E. & DELORSE A. HORNER
 Address RT. 5, BOX 195
CAMERON, WV 26033
 (b) Name _____
 Address _____
 (c) Name _____
 Address _____

5) (a) Coal Operator:
 Name _____
 Address _____
 (b) Coal Owner(s) with Declaration
 Name CONSOLIDATION COAL CO.
 Address 1800 WASHINGTON ROAD
PITTSBURGH, PA 15241
 Name _____
 Address _____
 (c) Coal Lessee with Declaration
 Name _____
 Address _____

6) Inspector RANDAL MICK
 Address 111 BLACKSHERE DR.
MANNINGTON, WV 26582
 Telephone (304)- 986-3324

*in
 office stage of
 10/26/93*

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
 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)
 ___ 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 COLUMBIA GAS TRANSMISSION CORP.
 By: Randal Mick RCWEIDEN
 Its: DIRECTOR, DRILLING & MAINTENANCE
 Address P. O. BOX 1273
CHARLESTON, WV 25325-1273
 Telephone 304, 357-2459

OFFICE OF THE
 NOTARY PUBLIC
 STATE OF WEST VIRGINIA
MARY PARSONS
 2052 Lincoln Avenue
 St. Albans, West Virginia 25177
 My Commission Expires Oct. 10, 1994

Subscribed and sworn before me this 9th day of June, 1993

Mary Parsons Notary Public
 My commission expires October 10, 1994