

County POSEY
T 4 S R 13 W
Sec SW NW SW 26
Other Survey

Quarry or Pit.....Core ..X..... Dim Other

Name ...Survey Drill Hole #303.....

Former Names

.....

Operator

Former Operators

COAL AND INDUSTRIAL MINERALS SECTION
INDIANA GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
611 NORTH WALNUT GROVE
BLOOMINGTON, INDIANA 47401

MEMORANDUM REPORTS BY:

Name

Date _____

	Curtis H. Ault	May 22, 1980
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10		

REMARKS

Survey Drill Hole No. 303
 500' FSL x 130' FWL SW1/4NW1/4SW1/4 sec. 26, T. 4 S., R. 13 W.
 Posey County, Indiana
 Elevation 437 feet
 Drilling completed May 22, 1980

Described by Prodip Dutta

Core description

<u>Unit</u>	<u>Description</u>	<u>Depth (ft.)</u>	<u>Thickness (ft.)</u>	<u>Sample No.</u>
<u>Pennsylvanian</u>				
1.	Shale, grayish black (N2).	630.0	0.4	J80-384
2.	Core lost.	630.4	2.4	None
3.	Shale, dark gray (N3), calcareous.	632.8	0.4	J80-385
4.	Shale, black (N1), with thin stringer of calcareous at places, carbonaceous.	633.2	1.3	J80-386
5.	Shale, grayish black (N2), with sand grains, carbonaceous.	634.5	0.2	J80-387
6.	Coal, black (N1).	634.7	0.1	J80-388
7.	Siltstone, very light gray (N8), with laminated dark gray carbona- ceous shale, wavy laminations with deformed structure.	634.8	1.1	J80-389
8.	Sandstone, very light gray (N8), very fine grained with dark carbonaceous shale laminations, calcareous.	635.9	2.1	J80-390
9.	Shale/siltstone, very light gray (N8), sandy laminations at places.	638.0	4.2	J80-391
10.	Shale, medium dark gray (N3), with siderite bands throughout.	642.2	1.9	J80-392
11.	Shale, dark gray (N3) to medium dark gray (N4), with siderite nodules and bands scattered throughout, carbonaceous plant imprints, occa- sional pyrite specks, fossiliferous towards bottom.	644.1	18.0	J80-393

12.	Shale, medium dark gray (N4), fossil fragments with siderite bands and nodules, highly calcareous.	662.1	2.3	J80-394
13.	Shale, black (N1), with calcareous stringer particularly at top, carbonaceous, occasional pyrite crystal.	664.4	2.3	J80-395
14.	Coal (core removed).	666.7	4.4	None
15.	Underclay, olive gray (5Y4/1), with carbonaceous specks and calcareous nodules and zones.	671.1	5.4	J80-396
16.	Shale/siltstone, light bluish gray (5B7/1), calcareous.	676.5	4.5	J80-397

File 592 posey
sdh 303

Survey Drill Hole No. 303
500' FSL x 130' FWL SW¼NW¼SW¼ sec. 26, T. 4 S., R. 13 W.
Posey County, Indiana
Elevation 437 feet
Drilling completed May 22, 1980
Described by Prodip Dutta

Unit	Description	Depth	Thick- ness	Sample
	Pennsylvanian			
1	Shale, grayish black (N2).	630.0	0.4	J80-0384
2	Core lost.	630.4	2.4	None
3	Shale, dark gray (N3), calcareous.	632.8	0.4	J80-385
4	Shale, black (N1), with thin stringer of calcareous at places, carbonaceous.	633.2	1.3	J80-386
5	Shale, grayish black (N2), with sand grains, carbonaceous.	634.5	0.2	J80-387
6	Coal, black (N1).	634.7	0.1	J80-388
7	Siltstone, very light gray (N8), with laminated dark gray carbonaceous shale, wavy laminations with deformed structure.	634.8	1.1	J80-389
8	Sandstone, very light gray (N8), very fine grained with dark carbonaceous shale laminations, calcareous.	635.9	2.1	J80-390
9	Shale/siltstone, very light gray (N8), sandy laminations at places.	638.0	4.2	J80-391
10	Shale, medium dark gray (N3), with siderite bands throughout.	642.2	1.9	J80-392
11	Shale, dark gray (N3) to medium dark gray (N4), with siderite nodules and bands scattered throughout, carbonaceous plant imprints, occasional pyrite specks, fossiliferous towards bottom.	644.1	18.0	J80-393
12	Shale, medium dark gray (N4), fossil fragments with siderite bands and nodules, highly calcareous.	662.1	2.3	J80-394
13	Shale, black (N1), with calcareous stringer particularly at top, carbonaceous, occasional pyrite crystal.	664.4	2.3	J80-395
14	Coal (core removed).	666.7	4.4	None
15	Underclay, olive gray (5Y4/1), with carbonaceous specks and calcareous nodules and zones.	671.1	5.4	J80-396
16	Shale/siltstone, light bluish gray (5B7/1), calcareous.	676.5	4.5	J80-397

Survey Drill Hole 303
 (twin hole to SDH 302)
 Approx. 500' FSL x 150' FWL SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 4 S., R. 13 W.
 Posey County, Indiana
 Elevation approx. 437 feet
 Completed May 22, 1980
 Driller: John Helms

Core description by Curtis H. Ault

Note: Well cuttings above 630 feet on file at the Survey but not described here (See twin well, SDH 302).

<u>Unit</u>	<u>Description</u>	<u>Thickness (ft.)</u>	<u>Depth to top of unit (ft.)</u>
Coring started at 630'			
PENNSYLVANIAN 51.0 feet cored			
<u>Dugger Formation, 36.7 feet cored</u>			
<u>Unnamed member, 4.7 feet cored</u>			
1.	Shale, black, hard.	0.4	630.0
2.	No core, probable wash out.	2.4	630.4
3.	Shale, black, pyritic plant imprints, finely micaceous, very black flecks, calcareous in top half.	1.9	632.8
<u>Bucktown Coal Mbr. (Vb), 0.13 feet</u>			
4.	Coal, black, thin bands of vitrain less than 40%, 60%+ dull to bright attritus, calcite on cleats.	0.13	634.7
<u>Unnamed member, 27.27 feet</u>			
5.	Shale, black, coaly.	0.07	634.83
6.	Siltstone, gray, shaly, calcareous, flaser structure, silty shale and apparent root structures in top 1'.	1.2	634.9
7.	Sandstone, gray, fine grained, calcareous, micaceous, thin argillaceous bands, dark gray.	2.0	636.1
8.	Shale, dark gray, silty, micaceous, a few thin siltstone laminations.	4.9	638.1
9.	Shale, dark gray, micaceous, carbonaceous plant imprints, slightly silty in part, some pyrite.	11.0	643.0
10.	Shale, dark gray, finely micaceous, a few dark carbonaceous flecks, brachiopod fragments, siderite nodules in basal 3'.	8.1	654.0

Alum Cave Limestone Mbr., 2.0 feet

- | | | | |
|-----|---|-----|-------|
| 11. | Shale, dark gray, very calcareous, shells and white fossil fragments becoming less at base, an argillaceous, gray limestone nodule at base. | 2.0 | 662.1 |
|-----|---|-----|-------|

Unnamed member, 2.6 feet

- | | | | |
|-----|--|-----|-------|
| 12. | Shale, black, finely micaceous, pyritic. | 2.6 | 664.1 |
|-----|--|-----|-------|

Petersburg Fm., 14.3 feet cored

Springfield Coal Mbr., 4.4 feet

- | | | | |
|-----|----------------|-----|-------|
| 13. | Coal as below: | 4.4 | 666.7 |
|-----|----------------|-----|-------|

Coal, moderate to abundant vitrain-medium banded, dull to bright attritus, some thin fusain bands, some pyrite coatings.	2.85'
Shaly coal band.	.05
Coal, as above.	<u>1.5</u>
	4.4

Unnamed member, 9.9 feet

- | | | | |
|-----|---|-----|-------|
| 14. | Underclay, light gray-green gray, crumbly soft, with carbonaceous flecks. | 1.9 | 671.1 |
| 15. | Underclay, light gray to green gray, as above, calcareous, with limestone nodule 1½" long of limestone, gray, micritic, healed fractures, at 674.9. | 3.3 | 673.0 |
| 16. | Shale, gray, silty to siltstone, gray, very argillaceous, micaceous. | 3.3 | 676.3 |
| 17. | Shale, gray, soft, silty in part, micaceous, pyrite. | 1.4 | 679.6 |

Total depth	681.0
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Survey Drill Hole 303
 (twin hole to SDH 302)
 Approx. 500'FSL x 150'FWL SW¼NW¼SW¼ sec. 26, T. 4 S., R. 13W.
 Posey County, Indiana
 Elevation approx. 437 feet
 Completed May 22, 1980
 Driller: John Helms
 Core description by Curtis H. Ault

Note: Well cuttings above 630 feet on file at the here Survey but not described (See twin well, SDH 302).

Unit	Description	Depth	Thick- ness
	Coring started at 630'		
	Pennsylvanian 51.0 feet cored		
	Dugger Formation, 36.7 feet cored		
	Unnamed member, 4.7 feet cored		
1	Shale, black, hard.	630.0	0.4
2	No core, probable wash out.	630.4	2.4
3	Shale, black, pyritic plant imprints, finely micaceous, very black flecks, calcareous in top half.	632.8	1.9
	Bucktown Coal Mbr. (Vb), 0.13 feet		
4	Coal, black, thin bands of vitrain less than 40%, 60%+ dull to bright attritus, calcite on cleats.	634.7	0.13
	Unnamed member, 27.27 feet		
5	Shale, black, coaly.	634.83	0.07
6	Siltstone, gray, shaly, calcareous, flaser structure, silty shale and apparent root structures in top 1'.	634.9	1.2
7	Sandstone, gray, fine grained, calcareous, micaceous, thin argillaceous bands, dark gray.	636.1	2.0
8	Shale, dark gray, silty, micaceous, a few thin siltstone laminations.	638.1	4.9
9	Shale, dark gray, micaceous, carbonaceous plant imprints, slightly silty in part, some pyrite.	643.0	11.0
10	Shale, dark gray, finely micaceous, a few dark carbonaceous flecks, brachiopod fragments, siderite nodules in basal 3'.	654.0	8.1
	Alum Cave Limestone Mbr., 2.0 feet		
11	Shale, dark gray, very calcareous, shells and white fossil fragments becoming less at base, an argillaceous, gray limestone nodule at base.	662.1	2.0
	Unnamed member, 2.6 feet		

12	Shale, black, finely micaceous, pyritic.	664.1	2.6
	Petersburg Fm., 14.3 feet cored		
	Springfield Coal Mbr., 4.4 feet		
13	Coal as below: Coal, moderate to abundant vitrain-medium 2.85' banded, dull to bright attritus, some thin fusain bands, some pyrite coatings, 2.85; Shaly coal band, .05; Coal, as above, 1.5.	666.7	4.4
	Unnamed member, 9.9 feet		
14	Underclay, light gray-green gray, crumbly soft, with carbonaceous flecks.	671.1	1.9
15	Underclay, light gray to green gray, as above, calcareous, with limestone nodule 1½" long of limestone, gray, micritic, healed fractures, at 674.9.	673.0	3.3
16	Shale, gray, silty to siltstone, gray, very argillaceous, micaceous.	676.3	3.3
17	Shale, gray, soft, silty in part, micaceous, pyrite.	679.6	1.4
	Total depth	681.0	

Widco*

WELL LOG

COMPANY INDIANA GEOLOGICAL SURVEY

AREA POSEYVILLE---POSEYVILLE QUADRANGLE

WELL SDH- 303

COUNTY POSEY STATE INDIANA

COORDINATES:

N

S

ELEVATION:

D.F.

G.I.

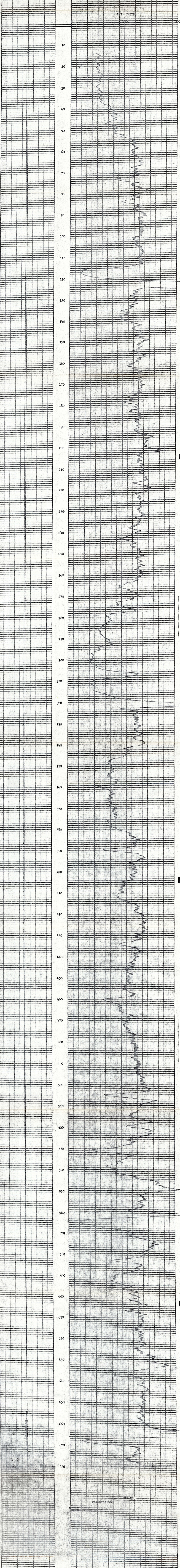
COMPANY Ind. Geol. Survey
WELL SDH- 303
LOCATION 26-43-13W
SE 1/4 SW 3/4

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	5-22-80		Nature		
First Reading	678.5		Density		
Last Reading	13.5		Viscosity	@	OF
Footage Logged	665.0		Resistivity	@	OF
Bottom (Driller)	680		Res. @ BHT	@	OF
Casing (From Log)	-----		pH		
Casing (Driller)	50		Circ. Temp.		
Casing Size	4 in.		B.H. Temp.		
Bit Size:	3 3/4 to 650 ft.				
Bit Size:	3 from 650 to 680				
T.C.=3 sec.					
Log Speed=15 ft/min			Logged by	J. Whaley	
Log Datum = Ground Level			Witnessed by	J. Helms	

REMARKS This is a companion hole of SDH-302.

Log run through size N (Joy Mfr. Co.) drill pipe.

* Reg. U.S. Pat. Off.



GEORGE W. OWEN INSTRUMENTS INC. LOGS MONTHLY

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

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NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

NO. 1-100-0

Widco

WELL LOG

COMPANY INDIANA GEOLOGICAL SURVEY

AREA POSEYVILLE---POSEYVILLE QUADRANGLE

WELL SDH-303

COUNTY POSEY STATE INDIANA

COORDINATES:

N

S

ELEVATION:

D.F.

K.B.

G.I.

COMPANY Ind. Geol. Survey

WELL SDH-303

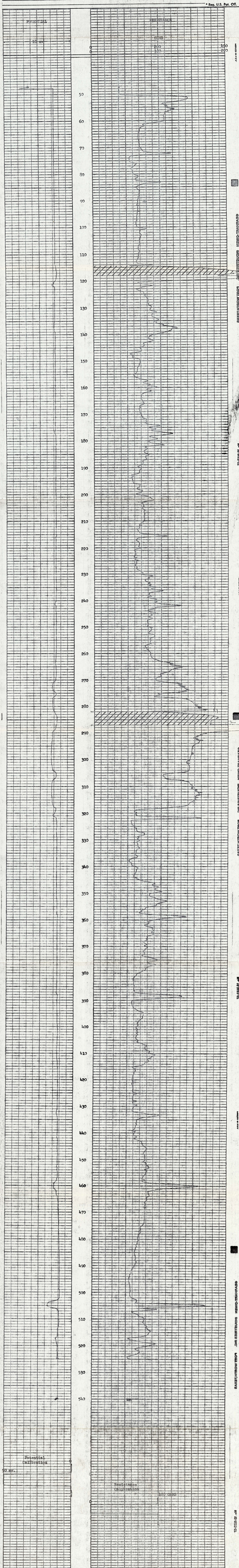
LOCATION 25-15-13N

SM NW SE

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	5-22-80		Nature		
First Reading	525		Density	@ of	@ of
Last Reading	50		Viscosity	@ of	@ of
Footage Logged	475		Resistivity	@ of	@ of
Bottom (Driller)	680		Res. @ BHT	@ of	@ of
Casing (From Log)	51		pH		
Casing (Driller)	50		Circ. Temp.		
Casing Size	4 in.		B.H. Temp.		
Bit Size	3 3/4 in.				
Log Datum = Ground Level			Logged by	J. Whaley	
			Witnessed by	J. Helms	

REMARKS Hole blocked at 525 feet.
This is a companion hole to SDH-302

* Reg. U.S. Pat. Off.



GEORGE W. OWEN INDUSTRIES INC. FORT MORTIMER, ILL.

NO. 12-100-01

NO. 12-100-01

GEORGE W. OWEN INDUSTRIES INC. FORT MORTIMER, ILL.

NO. 12-100-01

NO. 12-100-01

NO. 12-100-01

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