US EPA ARCHIVE DOCUMENT

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-114

Client: CHEVRON
Project: 2ND 2006 IM
Project No. 500-017

Well Condition: GOOD - ONLY 1' ABOVE GRADE
Geologist: O-CAM
Date: 11/29/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 82.25
Depth to Water: 73.70
Depth to Product: NP
Casing Diameter: 2"
Water Column: 8.55
Casing Volume (Water Column x Gallons per foot): 1.368
Purge Volume (3 x Casing Volume): 4.10

Purge Information

Purge Start Time: 1333
Purge Method: Low Flow
Flow Rate: 0.2 gpm or 0.75 Lpm

Time	Volume Removed	pH	Specific Conductivity mS/cm	Temperature °C	DO mg/L	ORP mV	Turbidity NTUs
1343	1.25 GAL	6.04	1.70	16.26	3.67	209	257
1348	2.50	6.02	1.69	16.81	3.73	207	338
1353	3.00	6.02	1.70	16.82	3.72	204	112
1358	3.750	6.02	1.71	16.35	3.87	188	16.9
1403	5.0	6.02	1.71	16.32	3.71	165	15.0
1408	6.0	6.02	1.70	16.78	3.73	161	18.2
1413	7.0	6.02	1.71	16.45	3.77	156	5.0
1418	8.0	6.02	1.71	16.71	3.81	154	2.7
1423	9.0	6.02	1.71	16.43	3.82	155	0.5

Purge Finish Time: 1425
Total Volume Purged: 9.0 GAL
Final Depth to Water: 73.71

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1425
Analytical Suite Collected: VOC's, DIS LEAD
QA/QC Samples Collected: BD1112906, FB1112906

Notes: IRON SLUDGE IN BOTTOM, NO ODOR, NO SHEEN

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-35

Client: CHEVRON
Project: 2ND 2006 IM
Project No. 500-017

Well Condition: GOOD
Geologist: D. LAM
Date: 11/29/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 46.81
Depth to Water: 35.80
Depth to Product: NP
Casing Diameter: 2"
Water Column: 11.01
Casing Volume (Water Column x Gallons per foot): 1.76
Purge Volume (3 x Casing Volume): 5.28

Purge Information

Purge Start Time: 1528
Purge Method: LOW FLOW
Flow Rate: 0.2 gpm or 0.75 lpm

Time	Volume Removed	pH	Specific Conductivity mS/cm	Temperature °C	DO mg/L	ORP mV	Turbidity NTU
1538	2.0	6.61	0.794	16.93	3.51	204	66.4
1543	3.0	6.61	0.806	17.00	3.27	200	50.2
1548	4.0	6.61	0.810	16.85	3.32	196	29.4
1553	4.7	6.62	0.805	16.98	3.20	192	28.5
1558	5.0	6.62	0.807	16.91	3.23	191	28.6
1603	6.0	6.62	0.808	16.65	3.32	187	7.9
1608	7.6	6.63	0.804	16.64	3.25	184	17.9
1613	7.75	6.63	0.804	16.65	3.23	183	16.2

Purge Finish Time: 1613
Total Volume Purged: < 8.0 GAL
Final Depth to Water: 35.81

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1615
Analytical Suite Collected: VOCs, DIS LEAD
QA/QC Samples Collected: NONE

Notes: NO ODOR, NO SHEEN, CLEAR AT END - INSTRUMENT GIVING ERRATIC READINGS FOR TURB

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-115D

Client: CHEVRON
Project: 2ND 2006 IM
Project No. 500-017

Well Condition: GOOD
Geologist: D. LAM
Date: 12/1/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 83.30
Depth to Water: 41.57
Depth to Product: NP
Casing Diameter: 2"
Water Column: 41.73
Casing Volume (Water Column x Gallons per foot): 6.68
Purge Volume (3 x Casing Volume): 20.04

Purge Information

Purge Start Time: 0955
Purge Method: LOW FLOW
Flow Rate: 0.15 gpm or 0.5 lpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1000	0.75 GAL	6.25	1.19	14.59	0.37	-101	360
1005	1.5 GAL	6.26	1.18	14.60	0.25	-102	123
1010		6.26	1.18	14.80	0.19	-96	86
1015	4.0 GA	6.27	1.18	14.78	0.15	-95	70
1020	5.92	6.27	1.18	14.80	0.14	-92	67
1025	6 GAL	6.28	1.18	14.79	0.11	-85	49.7
1030	7.25 GAL	6.28	1.18	14.67	0.10	-82	45
1035	9.0	6.28	1.18	14.67	0.10	-79	45

Purge Finish Time: 1035-1045
Total Volume Purged: 10 GAL
Final Depth to Water: 41.57

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1045
Analytical Suite Collected: VOC & DIS LEAD
QA/QC Samples Collected: NONE

Notes: NO ODOR NO SHEEN - TURBIDITY METER SOILED - READING INACCURATE
WATER CLEAR AT TIME OF SAMPLE

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-115S

Client: CHEVRON
Project: 2ND 2006 TM
Project No. 500-017

Well Condition: GOOD
Geologist: D. LAM
Date: 12/1/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 51.75
Depth to Water: 41.50
Depth to Product: NP
Casing Diameter: 2"
Water Column: 10.25
Casing Volume (Water Column x Gallons per foot): 1.64
Purge Volume (3 x Casing Volume): 4.92

Purge Information

Purge Start Time: 0830
Purge Method: Low Flow
Flow Rate: 0.1 gpm or 0.37 Lpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
0832	0.5 GAL	6.05	0.911	14.69	2.07	-103	13.8
0835	1.0 GAL	6.08	0.912	15.24	0.50	-119	3.8
0840	1.75 GAL	6.12	0.913	14.94	1.45	-127	2.0
0845	2.25 GAL	6.14	0.915	14.75	0.62	-132	1.6
0855	2.6 GAL	6.14	0.916	15.09	0.47	-136	2.1
0900	3.6 GAL	6.15	0.917	15.28	0.17	-140	1
0905	4.5 GAL	6.17	0.914	14.18	0.14	-140	2.6
0910	5.0 GAL	6.17	0.919	14.9	0.49	-144	1
0915	5.5 GAL	6.18	0.919	-	-	-145	1.1

Purge Finish Time: 0915
Total Volume Purged: 5.5 GAL
Final Depth to Water: 41.5

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 0920
Analytical Suite Collected: VOCs, DHS LEAD
QAQC Samples Collected: ~~MS/MSD~~ MW115S MS/MSD

Notes: NO ODOR / SHEEN, CLEAR

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-113

Client: CHEVRON
Project: 2ND 2006 IM
Project No. 500-017

Well Condition: Good
Geologist: D. Clark
Date: 12/1/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 81.10
Depth to Water: 77.59
Depth to Product: NP
Casing Diameter: 2"
Water Column: 3.51
Casing Volume (Water Column x Gallons per foot): 0.56
Purge Volume (3 x Casing Volume): 1.68

Purge Information

Purge Start Time: 1245
Purge Method: Low Flow
Flow Rate: 0.15 gpm or 0.5 Lpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1255	0.75 GAL	6.46	0.866	14.73	8.30	127	183
1300	1.0 GAL	6.46	0.863	15.07	8.38	130	98
1305	1.5 GAL	6.45	0.865	15.70	8.45	135	55
1310	2.0 GAL	6.45	0.865	17.02	8.52	139	52
1315	3.0 GAL	6.45	0.863	15.52	8.88	142	23.4
1320	4.0 GAL	6.45	0.862	15.30	8.78	147	15.6
1335	6.5	6.45	0.862	15.41	8.75	142	10.2

Purge Finish Time: 1335
Total Volume Purged: ~~XX~~ 7 GAL
Final Depth to Water: 77.60

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1340
Analytical Suite Collected: VOC's & Dis. LEAD
QA/QC Samples Collected: NONE

Notes: NO ODOR / SHEEN

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-95D

Client:	CHEVRON	Well Condition:	Good
Project:	2ND 2006 IM	Geologist:	D LAM
Project No.	500-017-009	Date:	12/2/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth:	104.60
Depth to Water:	76.42
Depth to Product:	NP
Casing Diameter:	2"
Water Column:	28.18
Casing Volume (Water Column x Gallons per foot):	7.51
Purge Volume (3 x Casing Volume):	22.53

Purge Information

Purge Start Time: 0950
Purge Method: Low Flow
Flow Rate: 0.1 gpm or 0.376 L/m

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
0955	0.5 GAL	6.12	1.18	13.83	7.42	60	152.0
1000	1.0 GAL	6.21	1.18	14.11	7.27	42	136.0
1005	1.75 GAL	6.25	1.19	14.15	7.13	30	71.6
1020	4.0 GAL	6.29	1.21	14.39	7.13	10	13.1
1030	5.25 GAL	6.30	1.21	14.50	7.10	-1	5.4
1040	6.5 GAL	6.36	1.22	14.52	7.11	24	4.9
1045	7.0 GAL	6.37	1.22	14.48	7.09	31	5
1050	8.0	6.37	1.22	14.50	7.10	41	5
1100	10 GAL	6.33	1.22	14.60	7.04	60	5
1105	10.5 GAL	6.33	1.22	14.55	7.09	69	4.9
1110	11 GAL	6.33	1.22	14.53	7.04	70	4.9

Purge Finish Time: 1112
Total Volume Purged: 11.5
Final Depth to Water: 76.39

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1115
Analytical Suite Collected: VOC's Dis Lead
QA/QC Samples Collected: None

Notes: No Sheen, No odor

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-85S

Client: Chevron Cincinnati
Project: ~~500-017-009~~ 2nd 2006 SA
Project No. 500-017-009

Well Condition: Good
~~Geologist~~: N. KASHANI
Date: 11/14/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 25.35
Depth to Water: 18.40
Depth to Product: NP
Casing Diameter: 2"
Water Column: 6.95'
Casing Volume (Water Column x Gallons per foot): 1.11 gal
Purge Volume (3 x Casing Volume): 3.33 gal

Purge Information

Purge Start Time: 1125
Purge Method: Low Flow
Flow Rate: 0.2 gpm or 0.75 lpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1135	0.25 Gal	6.80	748.5 µS/cm	66.15 °F	3.27 mg/L	-85 mV	195.9 NTUs
1150	4.00	6.77	745.7	66.34	1.25	-140	13.5
1205	7.5	6.68	740.3	66.17	1.62	-151	4.3
1220	11.5	6.53	736.9	66.25	1.76	-159	3.8
1235	15.0	6.53	734.4	66.26	1.82	-163	2.7
1240	17.5	6.63	731.1	66.24	1.84	-165	2.6
1245	19.0	6.63	730.1	66.26	1.84	-166	2.7

Purge Finish Time: 1245
Total Volume Purged: 19.00 Gallons
Final Depth to Water: 18.40

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1245
Analytical Suite Collected: VOCs, ~~MTBE~~, Dis. Lead
QC Samples Collected: None

Notes: Dis lead ~~for~~ sample got a bit disturbed in collection. Iron staining found at the bottom

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-26R

Client: Chevron Cincinnati
Project: 2nd 2006 SAIM
Project No. 500-017-009

Well Condition: Good
~~Geologist~~: N. KASHANI / D. BARRETT
Date: 11/15/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 52
Depth to Water: 38.62
Depth to Product: NP
Casing Diameter: 2"
Water Column: 13.38
Casing Volume (Water Column x Gallons per foot): 2.14
Purge Volume (3 x Casing Volume): 6.42

Purge Information

Purge Start Time: 1300
Purge Method: Low flow
Flow Rate: 0.2 gpm or 0.75 Lpm

Time	Volume Removed	pH	Specific Conductivity (ug/cm)	Temperature	DO	ORP	Turbidity (NTU)
1315	3.0 Gal	7.67	2.24	13.85°C	10.59 mg/L	53 mV	0.9
1325	4.5	7.76	2.27	13.17°C	9.97	48	1.0
1330	6.0	7.70	2.24	13.17°C	9.0	45	1.3
1335	7.0	7.74	2.21	13.90°C	8.32	44	1.8
1345	9.0	7.74	2.26	13.18°C	7.95	37	2.2

Purge Finish Time: 1400
Total Volume Purged: 9.0
Final Depth to Water: 38.63

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: ~~[illegible]~~ 1350
Analytical Suite Collected: VOCs, ~~[illegible]~~ dislead
QC Samples Collected: BD-61 ~~[illegible]~~

Notes:

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-27

Client: Chevron Cincinnati
Project: 2nd 2006 SAIM
Project No. 500.017-009

Well Condition: Good
~~Geologist~~: N. KASHANI, D. BARRETT
Date: 11/15/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 44.1 ~~[illegible]~~ ft
Depth to Water: 37.1 ft
Depth to Product: NP
Casing Diameter: ~~[illegible]~~ ~~[illegible]~~ 2.0"
Water Column: 7 FEET
Casing Volume (Water Column x Gallons per foot): 1.12 GAL
Purge Volume (3 x Casing Volume): 3.36 GAL

Purge Information

Purge Start Time: 1455
Purge Method: low flow
Flow Rate:

Time	Volume Removed	pH	Specific Conductivity (µg/cm)	Temperature	DO	ORP	Turbidity (NTU)
1505	2.5Gal	7.5	892.8	19.79°C	5.42mg/L	37 mV	2.4
1515	5.0Gal	7.64	889.3	19.76	4.58	33	1.4
1520	7.0Gal	7.66	890.4	19.73	4.022	29	1.0
1525	9.0Gal	7.63	880.8	19.82	3.47	27	0.9

Purge Finish Time: 1530
Total Volume Purged: ~~37.11~~ 9.0Gal
Final Depth to Water: 37.11

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1525
Analytical Suite Collected: ~~[illegible]~~ VOCs, dis lead
QC Samples Collected: ~~None~~ ~~[illegible]~~

Notes:

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-48D

Client: Chevron Cincinnati
Project: 2nd 2006 SAIM
Project No. 500-017c009

Well Condition: Good
~~Geologist~~: N. KASHANI, D. BARRETT
Date: 11/16/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 49.75 ft
Depth to Water: 14.78 ft
Depth to Product: NP
Casing Diameter: 2.0"
Water Column: 34.97'
Casing Volume (Water Column x Gallons per foot): 5.6 GAL
Purge Volume (3 x Casing Volume): 16.8 GAL

Purge Information

Purge Start Time: 1030
Purge Method: low flow
Flow Rate: 0.2 gpm or 0.75 Lpm

Time	Volume Removed	pH	Specific Conductivity (uS/cm SC)	Temperature	DO	ORP	Turbidity
~~1040~~ 1035	2.0 Gal	7.41	729.7	18.43°C	6.46 mg/L	66 mV	78.5 NTU
1050	5.0	7.41	731.5	18.19°C	4.15	48	8.2
1105	7.0	7.44	728.5	18.5	3.33	48	6.0
1115	10.5	7.43	730.7	18.2	2.67	47	3.4
1120	11.5	7.44	729.4	18.2	2.35	47	3.7
1125	12.5	7.44	731.1	18.19	2.03	47	2.8

Purge Finish Time: ~~1040~~ 1125
Total Volume Purged: 12.5 Gallons
Final Depth to Water: 13.74

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: ~~1040~~ 1125
Analytical Suite Collected: ~~BTEX~~ VOC, DIS lead
QC Samples Collected: MS/MSD

Notes: MS/MSD COLLECTED

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-48S

Client: Chevron Cincinnati
Project: 2nd 2006 SAIM
Project No. 500-017009

Well Condition: Good
Geologist: N. KASHANI, D. BARRETT
Date: 11/11/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 27.35
Depth to Water: 15.62 ft
Depth to Product: NP
Casing Diameter: 2"
Water Column: 11.73 Feet
Casing Volume (Water Column x Gallons per foot): 1.88 gal
Purge Volume (3 x Casing Volume): 5.64 gal

Purge Information

Purge Start Time: 1230
Purge Method: Lowflow
Flow Rate: 0.2 gpm or 0.75 lpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1240	1.0	7.10	694	16.78	0.44	-141	5.7
1250	4.0	7.12	677	16.84	0.43	-179	4.5
1300	6.0	7.12	675	16.75	0.38	-197	4.2
1310	8.0	7.13	673.8	16.78	0.35	-212	4.4
1320	9.5	7.12	673.8	16.82	0.35	-221	3.8
1325	11.5	7.13	673.3	16.80	0.33	-229	3.6

Purge Finish Time: ~~1325~~ 1325
Total Volume Purged: 11.5 Gal
Final Depth to Water: 15.6 ft

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: ~~1330~~ 1325
Analytical Suite Collected: VOCs, ~~DUPLICATE~~, DISS lead
QA/QC Samples Collected: None

Notes: Diss iron sample was a bit disturbed at collection. There was an iron staining at the bottom.

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. MW-104S

Client: Chevron Cincinnati
Project: 2nd 2006 SAIM
Project No. 500-617-009

Well Condition: Good
Geologist: N. KASHANI, D. BARRETT
Date: 11/16/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 24.07 Ft
Depth to Water: 17.17 Ft
Depth to Product: NP
Casing Diameter: 2.0"
Water Column: 8.9 feet
Casing Volume (Water Column x Gallons per foot): 1.42 gal
Purge Volume (3 x Casing Volume): 4.26 gal

Purge Information

Purge Start Time: 1445
Purge Method: Low Flow
Flow Rate: 0.2 gpm ~~or~~ 0.25 gpm

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1455	2.0 Gal	7.31	703.6	19.21 °C	1.04	1	46.1
1510	4.5	7.32	704.0	19.16	0.99	-4	20.0
1525	7.5	7.34	703.6	19.12	0.96	-6	10.4
1540	10.00	7.33	703.6	19.28	0.93	-8	11.6
1545	11.0	7.33	703.1	19.24	0.91	-9	9.7
1550	12.00	7.33	702.6	19.22	0.91	-9	4.76
1555	13.00	7.33	703.6	19.21	0.81	-9	9.8

Purge Finish Time: 1610
Total Volume Purged: 13.00 Gal
Final Depth to Water: 17.14 Ft

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1600
Analytical Suite Collected: VOCs, SVOCs, Dis Lead
QA/QC Samples Collected: None

TriHydro Corporation
Engineering and Environmental Services

Groundwater Sampling Form

Well No. L-9R

Client: Chevron
Project: 2nd 2006 IM
Project No. 500-017

Well Condition: Good
Geologist: N. KASHANI, D. BARNETT
Date: 11/17/06

Well Information

Casing Diameter	Gallons per Foot
1.5	0.09
2	0.16
4	0.65
6	1.5
8	2.6
10	4.1

Total Depth: 35.22 ft
Depth to Water: 26.25 ft.
Depth to Product: NP
Casing Diameter: 2"
Water Column: 8.97 feet
Casing Volume (Water Column x Gallons per foot): 1.44 gal
Purge Volume (3 x Casing Volume): 4.32 gal

Purge Information

Purge Start Time: 1105
Purge Method: LOW FLOW
Flow Rate: 0.15 gpm or 0.5 Lpm

ug/dm A C

Time	Volume Removed	pH	Specific Conductivity	Temperature	DO	ORP	Turbidity
1110	1.0 Gal	6.95	764.7	56.99 F	6.33 mg/L	25 mV	11.1 NTUs
1120	2.0	6.96	763.9	57.11	5.36	~~36~~ 6	6.9
1130	3.5	6.97	761.7	57.15	4.38	-17	3.6
1135	4.5	6.97	763.4	57.31	3.86	-22	1.5
1140	5.5	6.96	761.5	57.23	3.48	-26	3.3
1145	6.5	6.98	762.2	57.87	3.15	-28	1.8

Purge Finish Time: 1200
Total Volume Purged: 6.5 Gal
Final Depth to Water: 26.25

Sampling Information

Wellhead Gas Measurements: NA
Sample Collection Time: 1150
Analytical Suite Collected: VOCs + diss lead
QA/QC Samples Collected: NONE

Notes: