

1 LOCATION OF WATER WELL:	Fraction	Section Number	Township Number	Range Number
County: Ellis	NE ¼ SE ¼ NE ¼	28	T 13 S	R 18 E/W

Distance and direction from nearest town or city street address of well if located within city?
3501 N Vine St, Hays, KS, Lat: N 38° 53.692', Long: 99° 19.091'

2 WATER WELL OWNER: **Chevron**
 RR#, St. Address, Box # : **2700 NE Seward Ave**
 City, State, ZIP Code : **Topeka, KS 66605**
 Board of Agriculture, Division of Water Resources
 Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

4 DEPTH OF COMPLETED WELL **35** ft. ELEVATION: **Unknown**

Depth(s) Groundwater Encountered 1 **22** ft. 2 _____ ft. 3 _____ ft.

WELL'S STATIC WATER LEVEL **Unk.** ft. below land surface measured on mo/day/yr _____

Pump test data: Well water was **N/A** ft. after _____ hours pumping _____ gpm

Est. Yield **N/A** gpm: Well water was **N/A** ft. after _____ hours pumping _____ gpm

Bore Hole Diameter **10.25** in. to **35** ft. and _____ in. to _____ ft.

WELL WATER TO BE USED AS:

5 Public water supply	8 Air conditioning	11 Injection well
1 Domestic	3 Feed lot	6 Oil field water supply
2 Irrigation	4 Industrial	7 Lawn and garden (domestic)
9 Dewatering	10 Monitoring well	

Was a chemical/bacteriological sample submitted to Department? Yes No If yes, mo/day/yr sample was submitted _____

Water Well Disinfected? Yes No

5 TYPE OF BLANK CASING USED:

1 Steel	3 RMP (SR)	5 Wrought Iron	8 Concrete tile	CASING JOINTS: Glued _____ Clamped _____
2 PVC	4 ABS	6 Asbestos-Cement	9 Other (specify below)	Welded _____
		7 Fiberglass		Threaded

Blank casing diameter **2*** in. to **8 & 15** ft., Dia **1**** in. to **25** ft., Dia **1** in. to **31&33-35** ft.

Casing height above land surface **0** in., weight **0.682*/0.315**** lbs./ft. Wall thickness or gauge No. **0.1875*/0.1575**** in.

TYPE OF SCREEN OR PERFORATION MATERIAL:

1 Steel	3 Stainless steel	5 Fiberglass	8 RMP (SR)	10 Asbestos-cement
2 Brass	4 Galvanized steel	6 Concrete tile	9 ABS	11 Other (specify)
				12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:

1 Continuous slot	3 Mill slot	5 Gauzed wrapped	8 Saw cut	11 None (open hole)
2 Louvered shutter	4 Key punched	6 Wire wrapped	9 Drilled holes	
		7 Torch cut	10 Other (specify)	

SCREEN-PERFORATED INTERVALS:

From 8 ft. to 12 (2") ft.	From 15 ft. to 21 (2") ft.
From 25 ft. to 27 (1") ft.	From 31 ft. to 33 (1") ft.

GRAVEL PACK INTERVALS:

From 0.75 ft. to 3 ft.	From 7 ft. to 12 ft.
From 14 ft. to 21 ft.	From 24 & 30 ft. to 27 & 33 ft.

6 GROUT MATERIAL:

1 Neat cement	2 Cement grout	3 Bentonite	4 Other cement + bentonite grout¹
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Grout intervals From **3** ft. to **6'** ft. From **6, 12 & 21** ft. to **7, 14 & 24** ft. From **27 & 33** ft. to **30 & 35** ft.

What is the nearest source of possible contamination:

1 Septic tank	4 Lateral lines	7 Pit privy	10 Livestock pens	14 Abandoned water well
2 Sewer lines	5 Cess pool	8 Sewage lagoon	11 Fuel storage	15 Oil well/ Gas well
3 Watertight sewer lines	6 Seepage pit	9 Feedyard	12 Fertilizer storage	16 Other (specify below)
			13 Insecticide storage	

Direction from well? **within plume** How many feet? **--**

FROM	TO	CODE	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	0.5 ft.	--	concrete			NOTE: ANNULUS SEALING & SAND PACK
0.5	6	03	silty clay	0.75	3 ft.	sand
6	15	02	brown, moist, soft, clayey silt	3	6	Portland cement + bentonite grout
15	17	03	brown, moist, silty clay	6	7	hydrated medium bentonite chips
17	24	02	brown, moist, clayey silt	7	12	sand
24	30	03	silty clay, some sand	12	14	hydrated medium bentonite chips
30	32.5	09	coarse sand	14	21	sand
32.5	35	03/04	brown, wet, sandy, silty clay	21	24	coated bentonite chips
				24	27	sand
				27	30	coated bentonite chips
				30	33	sand
				33	35	coated bentonite chips

*for 2" casing, **for 1" casing ¹for cement+bentonite grout interval

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was **(1) constructed** (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/yr) **11/10/06** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **616** This Water Well Record was completed on (mo/day/yr) **5/22/07** under the business name of **Thiele Geotech, Inc.** by (signature) *[Signature]*

INSTRUCTIONS: Please fill in blanks and circle the correct answers. Send three copies to Kansas Department of Health and Environment, Bureau of Water, 1000 S W Jackson St., Ste. 420, Topeka, Kansas 66612-1367. Telephone: 913-296-5545. Send one to WATER WELL OWNER and retain one for your records.



MONITORING WELL/BORING LOG

BORING/WELL No: **SB-17/V8W-3**

Pg. 1 of 2

Former Texaco Bulk Terminal and Retail Facility # 211441 3503 North Vine Street Hays, Kansas	DRILLER: Thiele Geotech	HOLE DIAMETER: 10 1/4"
	POT HOLE METHOD: Water Knife/Vacuum Truck	SVE WELL CASING: 2" SCH 40 PVC
SAIC PROJECT #: 06-6818-00-8670-100	DRILLING METHOD: CME 55 - Hollow Stem Auger	AS WELL CASING: 1" SCH 80 PVC
	SAMPLE METHOD: 2" by 2" split spoon	SVE WELL SCREEN: 2" SCH 40 PVC
LOGGED BY: Brad Wolfinger	DRILL BIT DIAMETER: 6 1/4" I.D.	AS WELL SCREEN: 1" SCH 80 PVC
	DATE POTHOLED: 11/7/06	Slot Size: 0.020"
	DATE DRILLED: 11/10/06	SEAL TYPE: Granular bentonite & chips, Portland cement
	WELL CONSTRUCTION: 11/10/06	FILTER PACK: No. 10-20 Silica Sand
	WELL DEVELOPMENT: N/A	WELL COVER: 12" steel vault
	GROUND ELEVATION:	CASING ELEVATION:

Depth (ft.)	Blow Counts	% Recovery	LITHOLOGY / DESCRIPTION	Field Screen PID (ppm)	UVIF Screening	Head Space PID (ppm)	Head Space FID (ppm)	Soil Type	USCS	Water Level	Depth (ft.)	Well Construction/Remarks
1			0'-6.5" Concrete			2.9	44.3				1	Sand to 0.75'
2			6.5"-4" SILTY CLAY (CL), dark gray, medium plasticity, soft, moist, <=5% fine sand, slight HC odor and possible HC staining.			10.0	41.1	CL			2	
3											3	Top of grout @ 3'
4			4'-6' SILTY CLAY (CL), brown, moist, medium-high plasticity, 5-10% fine sand, stiff, slight HC odor, no visible staining.	NR	NR	8.9	32.1				4	
5											5	
6			6'-15' CLAYEY SILT (ML), brown, moist, soft, low-medium plasticity, <=5% fine sand, weak HC odor but no visible staining, sporadic calcite inclusions and trace gravel.			14.9	63.7				6	Hydrated Medium Bentonite Chips
7											7	Sand @ 7'
8											8	
9	1,4,4,5	75.00%		54.2	NR	405.0	121.0				9	Sample SB17-S-(8'-10') SVE Screened 8'-12'
10			*strong HC odor starting at 10', but no visible staining.					ML			10	
11	0,2,9,9	75.00%	*limestone gravels at 11'-13', coarse to very coarse, poorly sorted.	1640.0	NR	2399.0	1008.0				11	
12											12	
13	4,4,2,2	100.00%	*slight increase in clay content at ~13'.	1023.0	NR	5141.0	5000 FO				13	Hydrated Medium Bentonite Chips
14											14	Sand @ 14'
15	2,2,4,6	100.00%	15'-17' SILTY CLAY (CL), brown, moist, sporadic limestone gravels, soft, <5% fine sand, no HC staining, but strong odors, medium-high plasticity. Sporadic CaCO ₃ inclusions.	3050.0	NR	4778.0	4113.0	CL			15	
16											16	SVE Screened 15'-21'
17	3,5,7,9	100.00%	17'-24' CLAYEY SILT (ML), same as 15'-17', but lower plasticity and higher silt content, firm.	2445.0	NR	5114.0	4392.0				17	
18											18	
19	4,6,7,9	100.00%		2220.0	NR	5092.0	4188.0	ML			19	
20											20	
21	4,6,9,11	100.00%		2295.0	NR	4795.0	4131.0				21	Sample SB17-S-(20'-22')
22											22	

Notes:



MONITORING WELL/BORING LOG

BORING/WELL No: **SB-17/VSW-3**

Pg. 2 of 2

Former Texaco Bulk Terminal and Retail
Facility # 211441
3503 North Vine Street
Hays, Kansas

DRILLER: Thiele Geotech
POTHOLE METHOD: Water Knife/Vacuum Truck
DRILLING METHOD: CME 55 - Hollow Stem Auger
SAMPLE METHOD: 2" by 2" split spoon
DRILL BIT DIAMETER: 6 1/4" I.D.
DATE POTHOLED: 11/7/06
DATE DRILLED: 11/10/06
WELL CONSTRUCTION 11/10/06
WELL DEVELOPMENT: N/A

HOLE DIAMETER: 10 1/4"
SVE WELL CASING: 2" SCH 40 PVC
AS WELL CASING: 1" SCH 80 PVC
SVE WELL SCREEN: 2" SCH 40 PVC
AS WELL SCREEN: 1" SCH 80 PVC
Slot Size: 0.020"
SEAL TYPE: Granular bentonite & chips, Portland cement
FILTER PACK: No. 10-20 Silica Sand
WELL COVER: 12" steel vault
CASING ELEVATION:

SAIC PROJECT #:
06-6818-00-8670-100

LOGGED BY: Brad Wolffinger

GROUND ELEVATION:

Depth (ft.)	Blow Counts	% Recovery	LITHOLOGY / DESCRIPTION	Field Screen PID (ppm)	UVIF Screening	Head Space PID (ppm)	Head Space FID (ppm)	Soil Type	USCS	Water Level	Depth (ft.)	Well Construction/Remarks
22											22	
23	1,5,8,10	58.33%	*sand seam @23'8". Medium to coarse grained sand, ~6" thick, poorly sorted, gray staining, saturated.	1575.0	NR	4351.0	3980.0	ML			23	Coated bentonite chips
24			*HC mottling starting in clayey silt starting at ~23'.								24	Sand @ 24'
25	0,1,3,4	100.00%	24'-30'	1920.0	None	4418.0	3761.0				25	Sample SB17-S-(24'-26')
26			SILTY CLAY (CL), same as 17'-24', but softer and higher plasticity. Slight increase in sand content, ~5-15% fine sand, moist-wet.								26	AS Screened 25'-27'
27	3,2,2,4	100.00%	*sandy gravel layer at 26', ~6" thick.	15.8	None	602.0	295.0	CL			27	
28			*clayey fine sand layer at 26.5', ~6" thick.								28	
29	1,2,5,12	100.00%	*saturated at 26', still strong HC odor, slight mottling, but no bad staining.	16.3	None	910.0	399.0				29	Coated bentonite chips
30			*sandy clay at ~29', find grained sorting down to coarse, gravelly sand with clay at 30'. No HC staining at 30', slight to no HC odor.								30	Sand @ 30'
31	1,3,10,5	100.00%	30'-32.5'	34.8	NR	319.0	136.0	SP			31	Sample SB17-S-(30'-32')
32			POORLY SORTED SANDS (SP), coarse to gravelly, saturated, loose, no HC impacts.								32	AS Screened 31'-33'
33	2,2,3,3	100.00%	32.5'-34'	5.6	NR	203.0	73.7	CL			33	
34			SANDY, SILTY CLAY (SC), brown, wet, no HC impacts, soft to firmhigh plasticity.								34	Coated bentonite chips
35											35	
36											36	
37											37	
38											38	
39											39	
40											40	
41											41	
42											42	
43											43	

Notes: