Assessment of adjoining site

ENGEO
INCORPORATED
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LETTER OF TRANSMITTAL

TO: Scott Seery

DATE: November 11, 1997

FROM: Shawn Munger

PROJECT NO.: 4391-F3

SUBJECT: Ray Street Property – Pleasanton

CC:

REMARKS:

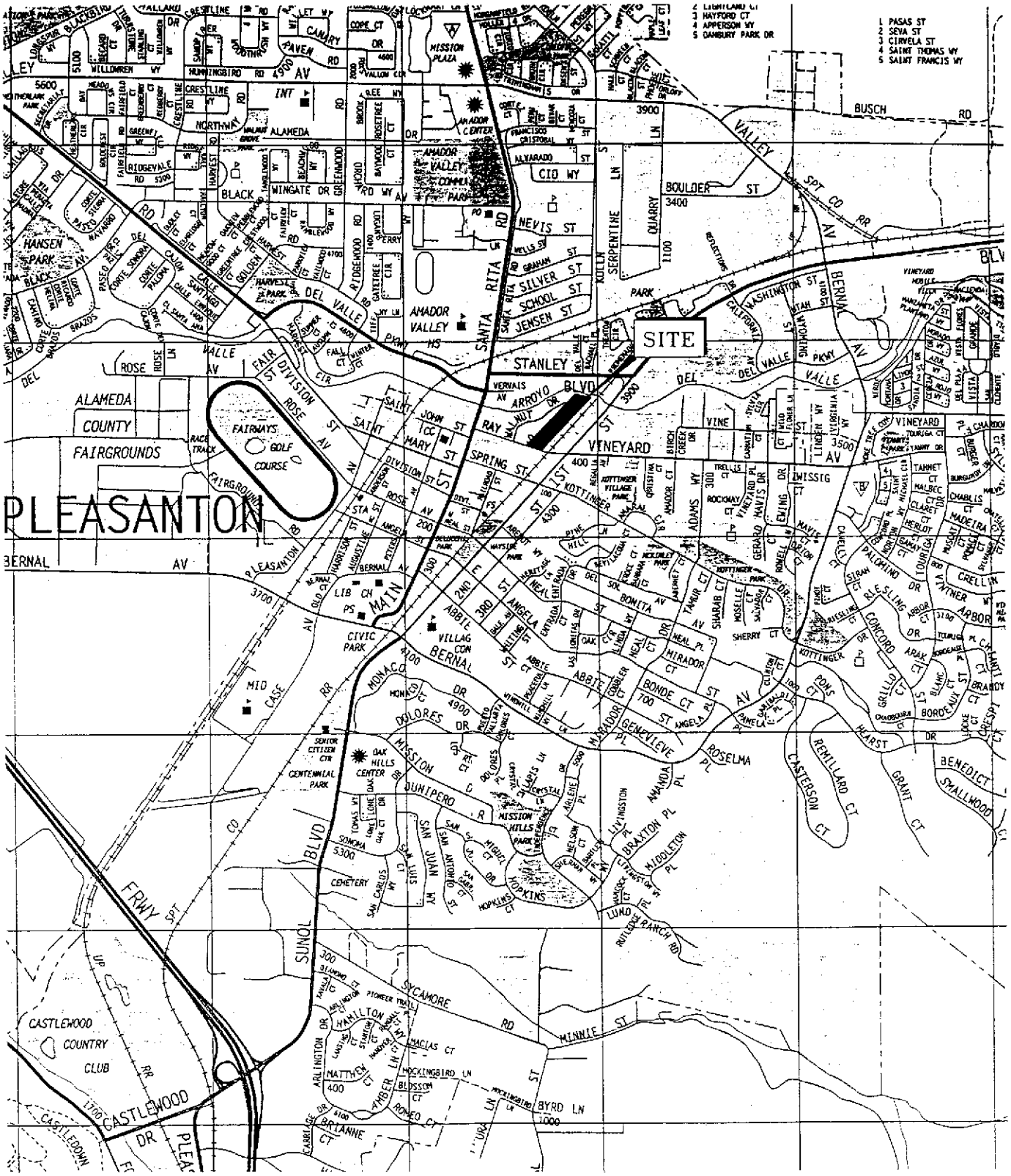
☐ Urgent ☒ For your review ☐ For your information ☐ Returning ☐ Copies at your request

Scott: At the request of our client, Trumark Companies, we are providing boring logs, laboratory test reports and a site plan for the subject project. Based on our review of the laboratory data, the site soils do not appear to have been impacted as a result of fuel releases at the UNOCAL site. The reported ground water contamination does not appear to pose a potential health risk. Given this information, the property appears suitable for residential development. Trumark would like to know what Alameda County will need to remove the use restrictions contained in the current closure certification.

I am available to meet with you, or discuss by telephone. If possible, Trumark would like to have some idea this week if further studies and/or documentation will be required.

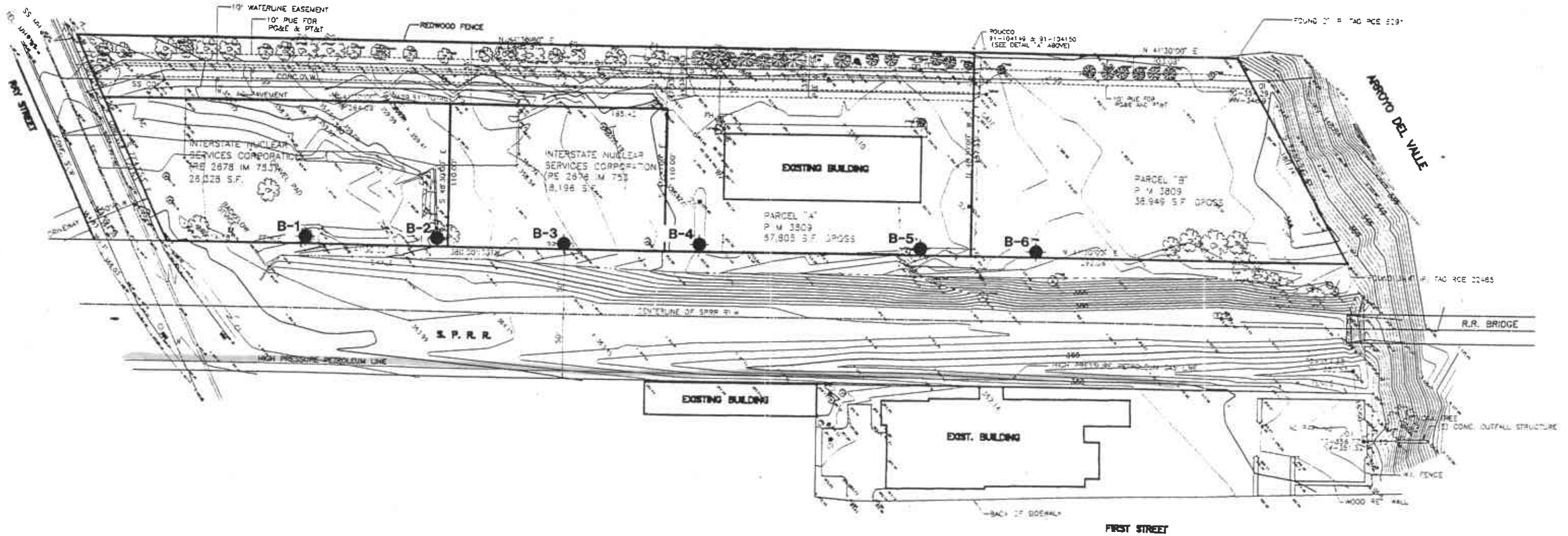
Thanks for your help in this matter

Shawn Munger



SOURCE: THOMAS BROTHERS

ENGEO INCORPORATED	SITE LOCATION PLAN RAY STREET PROPERTY PLEASANTON, CALIFORNIA	PROJECT NO.: 4391-F3 DATE: OCTOBER 1997 DRAWN BY: CHECKED BY:	FIGURE NO. 1



EXPLANATION

B-6 ● APROXIMATE LOCATION OF SOIL BORING

0 FEET 80
0 METERS 40

BASE: AL PASCUAL & ASSOCIATES, DATED 11/96

ENGEO INCORPORATED

SITE PLAN
RAY STREET PROPERTY
PLEASANTON, CALIFORNIA

PROJECT NO.: 4391-F3
DATE: OCTOBER 1997
DRAWN BY: CHECKED BY:

FIGURE NO. 2

ENGEO INCORPORATED

RAY STREET PROPERTY
SOIL/GROUND-WATER SAMPLE
LABORATORY ANALYSIS SUMMARY
(Concentrations reported in **parts per million**)

SAMPLE	DEPTH (ft)	TPH -G	BENZ	TOL	E.BENZ	XYL	MTBE
1-1	5½	<1.0	<.005	<.005	<.005	<.005	---
1-2	15	<1.0	<.005	<.005	<.005	<.005	---
1-3	25½	<1.0	<.005	<.005	<.005	<.005	---
1-4	35½	<1.0	<.005	<.005	<.005	<.005	---
2-1	5½	<1.0	<.005	<.005	<.005	<.005	---
2-2	15½	<1.0	<.005	<.005	<.005	<.005	---
2-3	25½	<1.0	<.005	<.005	<.005	<.005	---
2-4	35½	<1.0	<.005	<.005	<.005	<.005	---
3-1	5½	<1.0	<.005	<.005	<.005	<.005	---
3-2	15½	<1.0	<.005	<.005	<.005	<.005	---
3-3	25½	<1.0	<.005	<.005	<.005	<.005	---
3-4	35½	<1.0	<.005	<.005	<.005	<.005	---
4-1	5½	<1.0	<.005	<.005	<.005	<.005	---
4-2	15½	<1.0	<.005	<.005	<.005	<.005	---
4-3	25½	<1.0	<.005	<.005	<.005	<.005	---
4-4	36	<1.0	<.005	<.005	<.005	<.005	---
4-6	50½	<1.0	<.005	<.005	<.005	<.005	---
4-7	58½	<1.0	<.005	<.005	<.005	<.005	---
4-8	66½	<1.0	<.005	<.005	<.005	<.005	---
5-1	7	<1.0	<.005	<.005	<.005	<.005	---
5-2	15½	<1.0	<.005	<.005	<.005	<.005	---
5-3	25½	<1.0	<.005	<.005	<.005	<.005	---
5-4	35½	<1.0	<.005	<.005	<.005	<.005	---
5-5	40	<1.0	<.005	<.005	<.005	<.005	---
6-1	5½	<1.0	<.005	<.005	<.005	<.005	---
6-2	15½	<1.0	<.005	<.005	<.005	<.005	---
6-3	25½	<1.0	<.005	<.005	<.005	<.005	---
6-5	36	<1.0	<.005	<.005	<.005	<.005	---
6-6	40	<1.0	<.005	<.005	<.005	<.005	---
W-4	B4 Water Sample	**630**	**.023**	**.0015**	**.0009**	**.0008**	**480**
W-5	B5 Water Sample	<.050	<.0005	<.0005	<.0005	<.0005	**.007**
W-6	B6 Water Sample	**.120**	<.0005	<.0005	<.0005	**.0011**	<.005

~ 75'
~ 35'
~ 35'

11/97

DATE OF BORING: October 6, 1997

SURFACE ELEVATION: Approx. 360.0 feet msl (109.7 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
0				Grayish brown, silty GRAVEL with sand (granite to 1", sub-angular to sub-rounded), damp.(Fill)(GM)	24*	< 1		
	1					< 1		
				No Recovery.	18			
5		1-1		Brown silty GRAVEL with sand (granite to 1"), gravel subrounded, damp. (Native)(GM)	35*	1.4		
	2			Dark yellowish brown, silty CLAY with sand, slightly moist. (CL)				
10	3			Dark yellowish brown, silty CLAY with coarse sand, slightly moist. (CL)	45 25*	< 1		
				Brown very silty CLAY with sand, damp. (CL)		< 1		
	4			Dark yellowish brown, silty CLAY with sand, slightly moist. (CL)	29	< 1		
				Dark brown clayey GRAVEL (to 2/3", subrounded). (GC)				
15		1-2		Dark yellowish brown clayey SAND, moist. (SC)	21*	< 1		
				Brown clayey SAND with gravel (to 2/3", subrounded). (SC)				
	5			Yellowish brown SAND with clay and gravel (to 2/3", subrounded).(SP-SC)				
				Yellowish brown CLAY with sand, moist. (CL)				
				Yellowish brown clayey SILT, very moist. (ML)	26	< 1		
				Yellowish brown silty SAND, moist. (SM)				
20	6			Dark yellowish brown silty CLAY with sand and gravel (1/2", subrounded). (CL)	15			
				Dark yellowish brown clayey SILT, very moist. (ML)		< 1		
				Dark yellowish brown silty fine SAND, very moist. (SM)				
	7			Brown clayey GRAVEL with sand, slightly moist (granite to 1 1/2", subrounded)(SM)(GC)	54	< 1		
				Dark yellowish brown clayey SAND (fine to medium), very moist. (SC)	57*	< 1		
25		1-3		Dark brown clayey GRAVEL, (to 1", subrounded), moist. (GC)				
	8					< 1		
				Dark yellowish brown silty SAND layer, moist. (SM)	58	< 1		
					40*	< 1		
	9							
30						< 1		

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-1

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 6, 1997

SURFACE ELEVATION: Approx. 360.0 feet msl (109.7 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
				No recovery.	79			
	10			Dark yellowish brown clayey GRAVEL (to 2 1/2", subrounded), wet. (GC)	76*	< 1		
				Dark yellowish brown clayey fine to coarse SAND, wet. (SC)		< 1		
35		1-4			44	< 1		
	11			Dark yellowish brown clayey GRAVEL (2+", subrounded), very moist. (GC)		< 1		
					32*			
	12					< 1		
40					51	2.4		
					13*	< 1		
	13			Dark yellowish brown clayey SAND (fine to coarse grain), very moist. (SC)				
						< 1		
				Dark brown clayey GRAVEL (to 2/3", subrounded), moist. (GC)				
45		1-5		Dark yellowish brown silty CLAY. (CL)	79	< 1		
	14			Bottom of boring at approximately 45 feet.				
50	15							
	16							
55	17							
	18							
60								

DRAFT

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-1

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 6, 1997

SURFACE ELEVATION: Approx. 360.0 feet msl (109.7 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE: DRY UNIT WEIGHT (PCF)	IN PLACE: MOIST. CONTENT % DRY WEIGHT
0				Gray silty GRAVEL (to 3/4", subangular), dry. (Fill)(GM)				
				Grayish brown silty SAND with gravel (to 1/2", subangular, subrounded), damp. (SM)	22*	<1		
	1				28	<1		
5		2-1		Dark yellowish brown sandy CLAY, slightly moist. (CL)				
	2				22*	<1		
				Yellow brown clayey SAND with gravel (to 2/3", subroudned), damp. (SC)		<1		
10	3			DRAFT		<1		
	4				75	<1		
15		2-2		Dark yellowish brown clayey GRAVEL (to 1 1/2", subrounded), slightly moist. (GC)				
	5			Dark brown clayey SAND with gravel (to 1/2", subrounded), slightly moist. (SC)	8*	<1		
					70	<1		
20	6			Dark yellowish brown clayey SAND, moist. (SC)				
				Dark yellowish brown silty fine SAND, very moist. (SM)	25*	<1		
	7			Dark yellowish brown fine sandy SILT. (ML)	20	<1		
25		2-3		Dark yellowish brown, silty fine SAND. (SM)				
	8			Dark yellowish brown silty CLAY with gravel (to 3/4", subrounded). (CL)	45*	<1		
					106	<1		
30	9			Dark brown clayey GRAVEL (to 1 1/2", subrounded), moist. (GC)				

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-2

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 6, 1997

SURFACE ELEVATION: Approx. 360.0 feet msl (109.7 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE: DRY UNIT WEIGHT (PCF)	IN PLACE: MOIST. CONTENT % DRY WEIGHT
				Mottled dark yellowish brown/gray clayey SILT, very moist, locally strong, iron staining. (ML-CL)	29*	<1		
	10			Mottled darkish yellow brown/gray silty CLAY, very moist, iron staining. (CL)	53	<1		
35		2-4		Mottled darkish yellow brown/gray clayey SILT, very moist, iron staining. (ML-CL)	25*			
	12			Dark yellowish brown silty fine SAND. (SM)				
40		2-5			40			
				Bottom of boring at approximately 40 feet.				
45	13							
	14							
50	15							
	16							
55	17							
	18							
60								

DRAFT

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-2

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 8, 1997

SURFACE ELEVATION: Approx. 358.0 feet msl (109.1 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE: DRY UNIT WEIGHT (PCF)	IN PLACE: MOIST. CONTENT % DRY WEIGHT
0				Dark grayish brown silty SAND with gravel (to 2 1/4", subangular to subrounded), dry. (Fill) (SM)	19*	<1		
	1			Dark grayish brown silty SAND becoming clayey with gravel including asphaltics, damp. (Fill) (SM-SC)	21	<1		
5		3-1		Brown silty SAND with gravel (to 2/3", subrounded), damp. (SM)				
	2			DRAFT	15*	<1		
					19	<1		
10	3			Dark gray/brown clayey SAND with gravel, moist. (SC)				
					22*	1.0		
				Dark yellowish brown GRAVEL clay and sand (to 2/3", subrounded), moist. (CL)				
	4			Dark yellowish brown clayey GRAVEL with sand. (GC)	44	<1		
15		3-2		Dark brown clayey fine and medium SAND, very moist. (SC)				
	5			Mottled yellowish brown/dark grayish brown clayey medium to coarse SAND, moist. (SC)	31*			
				Dark gray/brown clayey SAND, moist, moderate iron staining common. (SC)	38			
20	6			Dark yellowish brown clayey SAND with gravel (to 2/3", subrounded), moist. (SC)				
				Dark yellowish brown clayey fine to medium SAND, very moist. (SC)	36*	<1		
	7			Dark yellowish brown CLAY with incremental fine to medium sand, very moist. (CL)	20	<1		
25		3-3		Dark yellowish brown sandy CLAY, very moist. (CL)				
	8			Mottled dark yellowish brown/gray silty clayey fine to medium SAND, wet. (SC)	14*	<1		
				Dark yellowish brown clayey GRAVEL (to 1", subrounded) with sand, very moist. (GC)	45	<1		
30	9			Dark yellowish brown clayey fine SAND, wet. (SC)				

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-3

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY:

FIGURE NO.

DATE OF BORING: October 8, 1997

SURFACE ELEVATION: Approx. 358.0 feet msl (109.1 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
				Dark gray clayey GRAVEL (to 1 1/2", subangular to subrounded), very moist. (GC)	27*	<1		
	10				50	<1		
35		3-4		Dark yellowish brown clayey SAND with gravel (to 2", subrounded). (SC)				
	11			Dark yellowish brown very silty CLAY, very moist, moderate iron staining common. (CL)	18	<1		
						<1		
	12							
40		3-5			33	<1		
				Bottom of boring at approximately 40 feet.				
	13							
45								
	14							
	15							
50								
	16							
55	17							
	18							
60								

DRAFT

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-3

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 7, 1997

SURFACE ELEVATION: Approx. 355.0 feet msl (108.2 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE: DRY UNIT WEIGHT (PCF)	IN PLACE: MOIST. CONTENT % DRY WEIGHT
0			CONCRETE.				
			Gray AGGREGATE.				
			Dark yellowish brown silty clayey SAND (fine to coarse), with gravel (fine gravels are subrounded), slightly moist. (SC)	7*	< 1		
	1		Dark grayish brown fine sandy SILT, slightly moist. (ML)				
5		4-1	Very dark grayish brown fine sandy SILT, moist. (ML)				
	2		Very dark gray/brown silty fine SAND, moist. (SM)	5*	< 1		
				3			
			Dark brown clayey GRAVEL (to 1", subrounded), moist. (GC)				
10	3		Very dark grey/brown clayey SILT with fine sand, moist. (ML)				
				28*	< 1		
	4		Dark yellowish brown clayey SAND (fine to medium grain), moist. (SC)	46	< 1		
15		4-2	DRAFT				
	5			26*	< 1		
				40	< 1		
20	6		Dark yellowish brown clayey fine SAND with trace gravel (to 1/2", subrounded), very moist. (SC)	18*	< 1		
	7			21	1.0		
25		4-3	Dark yellowish brown silty fine to medium SAND, wet. (SM)				
	8			9*	< 1		
			Dark grayish brown clayey fine SAND, wet. (SC)	15	1.5		
	9		Dark yellowish brown clayey fine SAND, very moist. (SC)				
30							

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-4

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 7, 1997

SURFACE ELEVATION: Approx. 355.0 feet msl (108.2 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
			Dark grayish brown silty fine SAND, wet. (SM)	10*	<1		
	10		Dark grayish brown silty GRAVEL (to 1 1/4", subrounded) with sand, very moist. (GM)	55	2.0		
35	11	4-4	Dark grayish brown silty clayey fine SAND, wet. (SC)	23*	2.0		
			Mottled gray/dark yellowish brown clayey fine to medium SAND, wet, moderate iron staining common. (SC)	15	<1		
40	12		Dark grayish brown clayey GRAVEL (to 1 1/4", subrounded). (GC)	2*	2.5		
	13		Dark yellowish brown clayey fine to coarse SAND, wet. (SC)	58	<1		
45		4-5	Dark gray clayey coarse to fine SAND with gravel (to 1 1/2", subrounded). (SC)		1.5		
	14		Dark yellowish brown fine sandy CLAY, very moist. (CL)	11*	<1		
			Mottled grayish brown/dark yellowish brown clayey SILT, very moist, strong iron staining common. (ML)	21	<1		
50	15	4-6			<1		
			Show of water on sample and clay fractures.				
	16		Dark yellowish brown clayey GRAVEL, saturated. (GC) Dark yellowish brown, silty CLAY, wet. (CL)	16* 5	<1 <1		
55			DRAFT				
	17		No recovery.	11*			
		4-7	Yellowish brown clayey fine SAND, wet. (SC)	8			
	18			44			
60				19*	<1		

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-4

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 7, 1997

SURFACE ELEVATION: Approx. 355.0 feet msl (108.2 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
	19			Yellowish brown clayey fine SAND with moderate iron staining common, very moist. (SC)	45	3.0		
65	20	4-8		Gray brown/dark yellowish brown fine sandy very silty CLAY, very moist, moderate iron staining abundant. (CL)	35*	<1		
		4-9		Brown silty medium to coarse SAND with gravel (to 1", subangular to subrounded), saturated. (SM)	75	<1		
70	21							
	22			Dark yellowish brown clayey fine SAND, wet. (SC)	8*	8.5		
75	23			▽ Approximate depth of ground water.				
	24							
80	25			Bottom of boring at approximately 80 feet. Ground-water sample W-4 recovered at 15:20.				
85	26							
	27							
90	28							

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OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-4

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 7, 1997

SURFACE ELEVATION: Approx. 355.0 feet msl (108.2 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
0				Gray aggregate, dry. (Fill)				
				Dark grayish brown clayey SILT with sand and gravel (to 2"subrounded), moist. (Fill) (ML)	7*	< 1		
	1				6	< 1		
5								
	2				24*	1.0		5-1
					8	< 1		
10	3			Dark grayish brown very silty CLAY, tree roots, moist. (CL)				
					11*	< 1		
	4				8	< 1		
15		5-2						
	5			Dark yellow brown clayey fine to coarse SAND with gravel (to 2/3", subrounded), very moist. (SC)	11*	< 1		
					26	< 1		
20	6			Dark yellowish brown clayey GRAVEL (to 1 1/2", subrounded), moist. (GC)				
					24*	< 1		
	7			Dark yellowish brown, clayey fine to medium SAND, moist. (SC)				
					45	< 1		
25		5-3						
	8				11*	< 1		
				Dark yellowish brown clayey fine to coarse SAND. (SC)	20	< 1		
30	9			Dark brown silty CLAY with sand, very moist. (CL)				

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-5

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 7, 1997

SURFACE ELEVATION: Approx. 355.0 feet msl (108.2 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
				Mottled dark brown/dark gray clayey SILT, very moist. (ML)	4*	< 1		
	10			Mottled dark brown/dark gray clayey very silty fine SAND, very moist, moderate iron staining common. (SM)				
				Dark gray silty fine to medium SAND, very moist. (SM)	13	1.5		
35		5-4		▽ Approximate depth of ground water.				
	11			Dark gray silty CLAY with sand, very moist. (CL)				
				Dark gray well graded GRAVEL (to 1 1/2" m.s. subrounded) with clay and sand, saturated. (GW)	17*			
	12							
40		5.5		Dark gray brown clayey GRAVEL (to 1 1/4", subrounded), very moist. (GC)	88			
				Bottom of boring at approximately 40 feet. Ground-water sample recovered at 18:50.				
	13							
45								
	14							
	15							
50								
	16							
55								
	17							
	18							
60								

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-5

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 8, 1997

SURFACE ELEVATION: Approx. 353.0 feet msl (107.6 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE: DRY UNIT WEIGHT (PCF)	IN PLACE: MOIST. CONTENT % DRY WEIGHT
0				Dark grayish brown silty GRAVEL with sand and cobbles (including concrete and asphalt). (Fill)(GM)				
				Dark gray brown clayey SILT with fine sand, tree roots, damp. (ML)	3*	< 1		
	1				3	< 1		
5		6-1						
				DRAFT	8*	< 1		
	2							
					5	< 1		
10	3							
					26*			
				Dark grayish brown silty CLAY with sand, moist. (CL)				
	4				11	< 1		
15		6-2						
	5			Dark yellowish brown clayey GRAVEL (to 3/4", subrounded) with sand, moist. (GC)	26*			
					26			
20	6			Dark yellowish brown/dark gray brown silty CLAY with gravel (to 1/2", subrounded). (CL)				
				Dark yellowish brown clayey GRAVEL (to 1", subrounded), moist. (GC)	40*	< 1		
	7				46	< 1		
25		6-3						
	8				18*	< 1		
				Dark brown clayey fine to coarse SAND, moist. (SC)				
					40			
30	9			Dark yellowish brown clayey SAND with trace gravel (to 3/4", subrounded), moist. (SC)				

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-6

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

DATE OF BORING: October 8, 1997

SURFACE ELEVATION: Approx. 353.0 feet msl (107.6 meters msl)

DEPTH (FEET)	DEPTH (METERS)	SAMPLE NUMBER	LOG, LOCATION AND TYPE OF SAMPLE	DESCRIPTION	N S.P.T. BLOWS/FT *MODIFIED FOR 3" O.D. SAMPLER	OVM READING P.I.D. (10.0eV) (parts per million)	IN PLACE DRY UNIT WEIGHT (PCF)	IN PLACE MOIST. CONTENT % DRY WEIGHT
		6-4		Mottled dark brown/dark gray very fine sandy SILT, very moist. (ML)	19*	< 1		
	10			Dark gray brown silty fine SAND, wet. (SM)				
				Mottled dark brown/dark gray very fine sandy SILT, very moist. (ML)	15	< 1		
35		6-5		▽ Approximate depth of groundwater.				
	11			Dark gray brown silty GRAVEL (to 1", subrounded), saturated. (GM)	27*			
	12	6-6		Reddish brown sandy CLAY, very wet. (SC)	32			
40				Bottom of boring at approximately 40 feet. Ground-water sample W-6 recovered at 15:20				
	13							
45								
	14							
	15							
50								
	16							
55								
	17							
	18							
60								

OVMMET 4391 11/3/97

ENGEO INCORPORATED

RAY STREET PROPERTY

PLEASANTON, CALIFORNIA

BORING NO.: B-6

DATE: November 1997

PROJECT NO.: 4391-F3

CHECKED BY

FIGURE NO.

Superior Analytical Laboratory

ENGEO INC
2401 Crow Canyon Rd, Suite 200
San Ramon, CA 9458

Date: October 9, 1997

Attn: Keith Nowell

Laboratory Number : 23309

Project Number/Name : 4391-F3
Facility/Site : 63/65/67 RAY STREET

Dear Keith Nowell:

Attached is Superior Analytical Laboratory report for the samples received on October 7, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 6, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Manager

Superior
Analytical Laboratory

CASE NARRATIVE

ENGEO INC
Project Number/Name: 4391-F3
Laboratory Number: 23309

Sample Receipt

Seventeen soil samples and
One water sample were received by
Superior Analytical Laboratory on October 7, 1997.

Cooler temperature was 5.1°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8015M, 8020 and HOLD.

Superior
Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 9, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23309

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
1-1	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	01
1-2	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	02
1-3	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	03
1-4	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	04
2-1	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	05
2-2	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	06
2-3	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	07
2-4	10/06/97	10/07/97	10/07/97	10/07/97	DJ071.37	08
4-1	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.37	09
4-2	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	10
4-3	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	11
4-4	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	12
4-6	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	14
4-7	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	15
4-8	10/07/97	10/07/97	10/07/97	10/07/97	DJ071.05	16
W-4	10/07/97	10/07/97	10/08/97	10/08/97	DJ082.37	18

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DJ082.37-01	Method Blank	MB		Water	10/08/97	10/08/97
DJ071.05-02	Laboratory Spike	LS		Soil	10/07/97	10/07/97
DJ071.05-03	1212 SS33-15-9.5	MS	23292-01	Soil	10/07/97	10/07/97
DJ071.05-04	1212 SS33-15-9.5	MSD	23292-01	Soil	10/07/97	10/07/97
DJ071.05-05	Method Blank	MB		Soil	10/07/97	10/07/97
DJ071.37-05	Method Blank	MB		Soil	10/07/97	10/07/97
DJ071.37-06	Laboratory Spike	LS		Soil	10/07/97	10/07/97
DJ071.37-07	B-3-5	MS	23300-09	Soil	10/07/97	10/07/97
DJ071.37-08	B-3-5	MSD	23300-09	Soil	10/07/97	10/07/97
DJ082.37-02	Laboratory Spike	LS		Water	10/08/97	10/08/97
DJ082.37-03	0930 GGW-58	MS	23277-05	Water	10/08/97	10/08/97
DJ082.37-04	0930 GGW-58	MSD	23277-05	Water	10/08/97	10/08/97

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 9, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23309-01	1-1	Soil	1.0	-
23309-02	1-2	Soil	1.0	-
23309-03	1-3	Soil	1.0	-
23309-04	1-4	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23309-01 Conc. mg/kg	RL	23309-02 Conc. mg/kg	RL	23309-03 Conc. mg/kg	RL	23309-04 Conc. mg/kg	RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Methyl-t-butyl-ether	NA		NA		NA		NA	
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	97		98		102		103	

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 9, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23309-05	2-1	Soil	1.0	-
23309-06	2-2	Soil	1.0	-
23309-07	2-3	Soil	1.0	-
23309-08	2-4	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23309-05 Conc. mg/kg	RL	23309-06 Conc. mg/kg	RL	23309-07 Conc. mg/kg	RL	23309-08 Conc. mg/kg	RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Methyl-t-butyl-ether	NA		NA		NA		NA	
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	99		94		101		101	

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 9, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23309-09	4-1	Soil	1.0	-
23309-10	4-2	Soil	1.0	-
23309-11	4-3	Soil	1.0	-
23309-12	4-4	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23309-09 Conc. mg/kg	23309-09 RL	23309-10 Conc. mg/kg	23309-10 RL	23309-11 Conc. mg/kg	23309-11 RL	23309-12 Conc. mg/kg	23309-12 RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Methyl-t-butyl-ether	NA		NA		NA		NA	
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	85		80		88		84	

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 9, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23309-14	4-6	Soil	1.0	-
23309-15	4-7	Soil	1.0	-
23309-16	4-8	Soil	1.0	-
23309-18	W-4	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23309-14 Conc. mg/kg	RL	23309-15 Conc. mg/kg	RL	23309-16 Conc. mg/kg	RL	23309-18 Conc. ug/L	RL
Gasoline Range	ND	1	ND	1	ND	1	630	50
Benzene	ND	0.005	ND	0.005	ND	0.005	23P	0.5
Toluene	ND	0.005	ND	0.005	ND	0.005	1.5	0.5
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	0.9	0.5
Methyl-t-butyl-ether	NA		NA		NA		480D	25
Xylenes	ND	0.005	ND	0.005	ND	0.005	0.8	0.5
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	91		85		89		120	

Superior
Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23309
Method Blank(s)

	DJ082.37-01		DJ071.05-05		DJ071.37-05	
	Conc. ug/L	RL	Conc. mg/kg	RL	Conc. mg/kg	RL
Gasoline Range	ND	50	ND	1	ND	1
Benzene	ND	0.5	ND	0.005	ND	0.005
Toluene	ND	0.5	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.5	ND	0.005	ND	0.005
Methyl-t-butyl-ether	ND	5				
Xylenes	ND	0.5	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	100		86		102	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23309

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
DJ071.05 02 / - Laboratory Control Spikes						
Gasoline Range		10	8.9	89	65-135	
Benzene		0.100	0.093	93	65-135	
Toluene		0.100	0.10	100	65-135	
Ethyl Benzene		0.100	0.10	100	65-135	
Xylenes		0.300	0.30	100	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				91	50-150	
For Soil Matrix (mg/kg)						
DJ071.37 06 / - Laboratory Control Spikes						
Gasoline Range		10	10	100	65-135	
Benzene		0.100	0.11	110	65-135	
Toluene		0.100	0.11	110	65-135	
Ethyl Benzene		0.100	0.11	110	65-135	
Xylenes		0.300	0.34	113	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				109	50-150	
For Water Matrix (ug/L)						
DJ082.37 02 / - Laboratory Control Spikes						
Gasoline Range		2000	1900	95	65-135	
Benzene		20	22	110	65-135	
Toluene		20	22	110	65-135	
Ethyl Benzene		20	22	110	65-135	
Xylenes		60	65	108	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				103	50-150	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23309

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) DJ071.05 03 / 04 - Sample Spiked: 23292 - 01						
Gasoline Range	ND	10	9.3/9.6	93/96	65-135	3
Benzene	ND	0.100	0.090/0.091	90/91	65-135	1
Toluene	ND	0.100	0.092/0.096	92/96	65-135	4
Ethyl Benzene	ND	0.100	0.099/0.10	99/100	65-135	1
Xylenes	ND	0.300	0.30/0.29	100/97	65-135	3
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				87/89	50-150	
For Soil Matrix (mg/kg) DJ071.37 07 / 08 - Sample Spiked: 23300 - 09						
Gasoline Range	ND	10	9.6/9.7	96/97	65-135	1
Benzene	ND	0.100	0.11/0.11	110/110	65-135	0
Toluene	ND	0.100	0.11/0.11	110/110	65-135	0
Ethyl Benzene	ND	0.100	0.11/0.11	110/110	65-135	0
Xylenes	ND	0.300	0.33/0.32	110/107	65-135	3
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				104/103	50-150	
For Water Matrix (ug/L) DJ082.37 03 / 04 - Sample Spiked: 23277 - 05						
Gasoline Range	ND	2000	2000/1900	100/95	65-135	5
Benzene	ND	20	22/21	110/105	65-135	5
Toluene	ND	20	22/22	110/110	65-135	0
Ethyl Benzene	ND	20	22/22	110/110	65-135	0
Xylenes	ND	60	65/65	108/108	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				105/104	50-150	

Superior Analytical Laboratory

Narrative:

D - Compound was quantitated on a diluted sample.
P - There is a greater than 25% difference for detected concentration between the two GC columns.

Definitions:

ND	=	Not Detected			
RL	=	Reporting Limit			
NA	=	Not Analysed			
RPD	=	Relative Percent Difference			
ug/L	=	parts per billion (ppb)	ug/kg	=	parts per billion (ppb)
mg/L	=	parts per million (ppm)	mg/kg	=	parts per million (ppm)

23309

ENGEO INCORPORATED
2401 CROW CANYON ROAD, SUITE 200
SAN RAMON, CALIFORNIA 94583
PHONE (510) 838-1600

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 4391-F3

PROJECT NAME: 63/65/67 Ray Street

SAMPLED BY: (SIGNATURE) Keith Nowell (Keith Nowell)

SAMPLE NUMBER	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	TPH – GASOLINE (EPA 8015/5030)	TPH – DIESEL (EPA 8015/3550/3510)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240)	BASE/NEUTRALS, ACIDS (EPA 625,8270)	TOTAL OIL & GREASE (SMWW 5520 (F))	OC PESTICIDES/PCB (EPA 608, 8080)	OP PESTICIDES (EPA 614/8140)	TITLE 26 METALS (17)	PRIORITY METALS (13)	MTBE	REMARKS REQUIRED DETECTION LIMITS
1-1	10-6-97	0925	Soil	1	6"x2.5"	Ice	X		X										
1-2	10-6-97	1000	Soil	1	6"x2.5"	Ice	X		X										
1-3	10-6-97	1045	Soil	1	6"x2"	Ice	X		X										
1-4	10-6-97	1200	Soil	1	6"x1.5"	Ice	X		X										
2-1	10-6-97	1450	Soil	1	6"x2.5"	Ice	X		X										
2-2	10-6-97	1535	Soil	1	6"x2.5"	Ice	X		X										
2-3	10-6-97	1640	Soil	1	6"x2.5"	Ice	X		X										
2-4	10-6-97	1740	Soil	1	6"x2.5"	Ice	X		X										
4-1	10-7-97	0800	Soil	1	6"x2.5"	Ice	X		X										
4-2	10-7-97	0835	Soil	1	6"x2.5"	Ice	X		X										
4-3	10-7-97	0915	Soil	1	6"x2.5"	Ice	X		X										
4-4	10-7-97	0950	Soil	1	6"x2.5"	Ice	X		X										
4-5	10-7-97	1040	Soil	1	6"x2.5"	Ice													Hold
4-6	10-7-97	~~1115~~ 1115	Soil	1	6"x2.5"	Ice	X		X										
4-7	10-7-97	1145	Soil	1	6"x1.5"	Ice	X		X										
4-8	10-7-97	1340	Soil	1	6"x2.5"	Ice	X		X										
4-9	10-7-97	1350	Soil	1	6"x1.5"	Ice													Hold
W-4	10-7-97	1520	Aqueous	2	40ml	Acid	X		X									X	

Please Initial: [initials]
Samples Stored in ice ✓ 3°C
Appropriate containers ✓
Samples preserved
VOA's without headspace
Comments:

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Keith Nowell	10/07/97 1540	[signature]	[signature]	10/7 4:49 pm	[signature]
RELINQUISHED BY: (SIGNATURE) X	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE) X	DATE/TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE) X	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE) [signature] 10/7/97	DATE/TIME 16 40	REMARKS FAX C-O-C to 510/838-7425 RUSH - 24 TAT.	

DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT; COPY TO PROJECT FIELD FILES

Superior Analytical Laboratory

ENGEO INC
2401 Crow Canyon Rd, Suite 200
San Ramon, CA 9458

Date: October 17, 1997

Attn: Keith Nowell

Laboratory Number : 23323

Project Number/Name : 4391-F3
Facility/Site : 63/65/67 RAY STREET

Dear Keith Nowell:

Attached is Superior Analytical Laboratory report for the samples received on October 8, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 7, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Manager

Superior
Analytical Laboratory

CASE NARRATIVE

ENGEO INC
Project Number/Name: 4391-F3
Laboratory Number: 23323

Sample Receipt

Five soil samples and
One water sample were received by
Superior Analytical Laboratory on October 8, 1997.

Cooler temperature was 4°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8015M and 8020.

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 14, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23323

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
5-1	10/07/97	10/08/97	10/13/97	10/13/97	DJ131.05	01
5-2	10/07/97	10/08/97	10/13/97	10/13/97	DJ131.05	02
5-3	10/07/97	10/08/97	10/13/97	10/13/97	DJ131.05	03
5-4	10/07/97	10/08/97	10/13/97	10/13/97	DJ131.05	04
5-5	10/07/97	10/08/97	10/13/97	10/13/97	DJ131.05	05

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DJ131.05-01	Method Blank	MB	Soil	10/13/97	10/13/97
DJ131.05-02	Laboratory Spike	LS	Soil	10/13/97	10/13/97
DJ131.05-03	5-1	MS 23323-01	Soil	10/13/97	10/13/97
DJ131.05-04	5-1	MSD 23323-01	Soil	10/13/97	10/13/97

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 14, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23323-01	5-1	Soil	1.0	-
23323-02	5-2	Soil	1.0	-
23323-03	5-3	Soil	1.0	-
23323-04	5-4	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23323-01 Conc. mg/kg	RL	23323-02 Conc. mg/kg	RL	23323-03 Conc. mg/kg	RL	23323-04 Conc. mg/kg	RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	68		84		77		85	

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 14, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23323-05	S-5	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23323-05 Conc. mg/kg	RL
Gasoline Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	89	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23323
Method Blank(s)

	DJ131.05-01 Conc. mg/kg	 RL
Gasoline Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	85	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23323

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) DJ131.05 02 / - Laboratory Control Spikes						
Gasoline Range		10	9.4	94	65-135	
Benzene		0.100	0.098	98	65-135	
Toluene		0.100	0.11	110	65-135	
Ethyl Benzene		0.100	0.11	110	65-135	
Xylenes		0.300	0.31	103	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				95	50-150	
For Soil Matrix (mg/kg) DJ131.05 03 / 04 - Sample Spiked: 23323 - 01						
Gasoline Range	ND	10	9.2/9.3	92/93	65-135	1
Benzene	ND	0.100	0.085/0.087	85/87	65-135	2
Toluene	ND	0.100	0.086/0.092	86/92	65-135	7
Ethyl Benzene	ND	0.100	0.090/0.094	90/94	65-135	4
Xylenes	ND	0.300	0.27/0.27	90/90	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				82/83	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 17, 1997
Revised on October 20, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23323

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
W-5	10/07/97	10/08/97	10/13/97	10/13/97	DJ132.37	06

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DJ132.37-01	Method Blank	MB		Water	10/13/97	10/13/97
DJ132.37-02	Laboratory Spike	LS		Water	10/13/97	10/13/97
DJ132.37-03	1245 EFF-1010	MS	23331-04	Water	10/13/97	10/13/97
DJ132.37-04	1245 EFF-1010	MSD	23331-04	Water	10/13/97	10/13/97

Superior
Analytical Laboratory

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 17, 1997
Revised on October 20, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23323-06	W-5	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23323-06 Conc. ug/L	RL
Gasoline Range	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Total Xylenes	ND	0.5
Methyl-t-butyl-ether	7	5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	105	

Superior

Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23323
Method Blank(s)

	DJ132.37-01 Conc. ug/L	RL
Gasoline Range	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Total Xylenes	ND	0.5
Methyl-t-butyl-ether	ND	5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	103	

Superior
Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23323

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DJ132.37 02 / - Laboratory Control Spikes						
Gasoline Range		2000	1900	95	65-135	
Benzene		20	22	110	65-135	
Toluene		20	22	110	65-135	
Ethyl Benzene		20	22	110	65-135	
Total Xylenes		60	66	110	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				104	50-150	
For Water Matrix (ug/L) DJ132.37 03 / 04 - Sample Spiked: 23331 - 04						
Gasoline Range	ND	2000	2000/2000	100/100	65-135	0
Benzene	ND	20	22/22	110/110	65-135	0
Toluene	ND	20	22/22	110/110	65-135	0
Ethyl Benzene	ND	20	22/22	110/110	65-135	0
Total Xylenes	ND	60	66/66	110/110	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				103/102	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

23323

ENGEO INCORPORATED

2401 CROW CANYON ROAD, SUITE 200
SAN RAMON, CALIFORNIA 94583
PHONE (510) 838-1600

CHAIN OF CUSTODY RECORD

PROJECT NAME: EF3 63/65/67 Ray Street

SIGNATURE: Nowell (Kevin Nowell)

DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	TPH – GASOLINE (EPA 8015/5030)	TPH – DIESEL (EPA 3015/3550/3510)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240)	BASE/NEUTRALS, ACIDS (EPA 625, 8270)	TOTAL OIL & GREASE (SMWW 5520(F))	OC PESTICIDES/PCB (EPA 608, 8080)	OP PESTICIDES (EPA 614/8140)	TITLE 26 METALS (17)	PRIORITY METALS (13)	MTBE	REMARKS REQUIRED DETECTION LIMITS
7/97	16:40	Soil	1	6"x6½"	Ice	X		X										Hold
7/97	17:00	Soil	1	6"x2½"	Ice	X		X										Hold
7/97	17:35	Soil	1	6"x2½"	Ice	X		X										Hold
7/97	10:20	Soil	1	6"x2½"	Ice	X		X										Hold
7/97	18:30	Soil	1	6"x1½"	Ice													Hold
7/97	18:30	Aqueous	3	40ml	Acid	X		X									X	Hold

Please Initial:
Samples Stored in ice. YES
Appropriate containers YES
Samples preserved YES
VOA's without headspace
Comments: Ice 4°C

Hold pending client authorization

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Kevin Nowell	10/8/97 14:22	
	10/8/97 15:30	

RECEIVED FOR LABORATORY BY: (SIGNATURE) — DATE/TIME: 10-9-97 15:40

REMARKS: 24Hr TAT on Water Samples
48Hr on Soil

DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT; COPY TO PROJECT FIELD FILES

10-9-97

23323

Please analyze samples S-1, S-2, S-3, S-4 S-5, and W-5 in accordance with chain of custody dated 10/8/97

ENGEO INC.

ENGEO INC
2401 Crow Canyon Rd, Suite 200
San Ramon, CA 9458

Date: October 13, 1997

Attn: Keith Nowell

Laboratory Number : 23319

Project Number/Name : 4391-F3
Facility/Site : 63/65/67 RAY STREET

Dear Keith Nowell:

Attached is Superior Analytical Laboratory report for the samples received on October 9, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 8, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Manager

CASE NARRATIVE

ENGEO INC
Project Number/Name: 4391-F3
Laboratory Number: 23319

Sample Receipt

Nine soil samples and
One water sample were received by
Superior Analytical Laboratory on October 9, 1997.

Cooler temperature was 5.9°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8015M and 8020.

GASBTXE/GBTXEMTBE

P - There is a greater than 25% difference for detected concentration between the two GC columns.
!!- Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 10, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23319

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
3-1	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	01
3-2	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	02
3-3	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	03
3-4	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	04
6-1	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	05
6-2	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	06
6-3	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	07
6-5	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	08
6-6	10/08/97	10/09/97	10/09/97	10/09/97	DJ091.37	09

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DJ091.37-01	Method Blank	MB	Soil	10/09/97	10/09/97
DJ091.37-02	Laboratory Spike	LS	Soil	10/09/97	10/09/97
DJ091.37-03	6-1	MS 23319-05	Soil	10/09/97	10/09/97
DJ091.37-04	6-1	MSD 23319-05	Soil	10/09/97	10/09/97

ENGEO INC
Attn: Keith Nowell

Project 4391-P3
Reported on October 10, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23319-01	3-1	Soil	1.0	-
23319-02	3-2	Soil	1.0	-
23319-03	3-3	Soil	1.0	-
23319-04	3-4	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23319-01 Conc. mg/kg	RL	23319-02 Conc. mg/kg	RL	23319-03 Conc. mg/kg	RL	23319-04 Conc. mg/kg	RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	92		103		105		62	

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 10, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23319-05	6-1	Soil	1.0	-
23319-06	6-2	Soil	1.0	-
23319-07	6-3	Soil	1.0	-
23319-08	6-5	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23319-05 Conc. mg/kg	RL	23319-06 Conc. mg/kg	RL	23319-07 Conc. mg/kg	RL	23319-08 Conc. mg/kg	RL
Gasoline Range	ND	1	ND	1	ND	1	ND	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	92		105		105		101	

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 10, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23319-09	6-6	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23319-09 Conc. mg/kg	RL
Gasoline Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	104	

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23319
Method Blank(s)

	DJ091.37-01 Conc. mg/kg	RL
Gasoline Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	107	

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23319

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
DJ091.37 02 / - Laboratory Control Spikes						
Gasoline Range		10	9.7	97	65-135	
Benzene		0.100	0.10	100	65-135	
Toluene		0.100	0.10	100	65-135	
Ethyl Benzene		0.100	0.10	100	65-135	
Xylenes		0.300	0.31	103	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				98	50-150	
For Soil Matrix (mg/kg)						
DJ091.37 03 / 04 - Sample Spiked: 23319 - 05						
Gasoline Range	ND	10	9.0/9.0	90/90	65-135	0
Benzene	ND	0.100	0.095/0.095	95/95	65-135	0
Toluene	ND	0.100	0.096/0.096	96/96	65-135	0
Ethyl Benzene	ND	0.100	0.092/0.093	92/93	65-135	1
Xylenes	ND	0.300	0.28/0.28	93/93	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				92/95	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 13, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23319

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
W-6	10/08/97	10/09/97	10/09/97	10/09/97	DJ092.37	10

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DJ092.37-01	Method Blank	MB		Water	10/09/97	10/09/97
DJ092.37-02	Laboratory Spike	LS		Water	10/09/97	10/09/97
DJ092.37-03	EFF-1008	MS	23311-01	Water	10/09/97	10/09/97
DJ092.37-04	EFF-1008	MSD	23311-01	Water	10/09/97	10/09/97

ENGEO INC
Attn: Keith Nowell

Project 4391-F3
Reported on October 13, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23319-10	W-6	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23319-10 Conc. ug/L	RL
Gasoline Range	120!!	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Total Xylenes	1.1P	0.5
Methyl-t-butyl-ether	ND	5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	105	

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23319
Method Blank(s)

	DJ092.37-01 Conc. ug/L	RL
Gasoline Range	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Total Xylenes	ND	0.5
Methyl-t-butyl-ether	ND	5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	102	

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23319

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DJ092.37 02 / - Laboratory Control Spikes						
Gasoline Range		2000	1900	95	65-135	
Benzene		20	21	105	65-135	
Toluene		20	22	110	65-135	
Ethyl Benzene		20	21	105	65-135	
Total Xylenes		60	65	108	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				106	50-150	
For Water Matrix (ug/L) DJ092.37 03 / 04 - Sample Spiked: 23311 - 01						
Gasoline Range	ND	2000	1900/1900	95/95	65-135	0
Benzene	ND	20	21/21	105/105	65-135	0
Toluene	ND	20	22/21	110/105	65-135	5
Ethyl Benzene	ND	20	21/21	105/105	65-135	0
Total Xylenes	ND	60	64/63	107/105	65-135	2
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102/102	50-150	

Narrative:

P - There is a greater than 25% difference for detected concentration between the two GC columns.
!!- Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.

Definitions:

ND	= Not Detected		
RL	= Reporting Limit		
NA	= Not Analysed		
RPD	= Relative Percent Difference		
ug/L	= parts per billion (ppb)	ug/kg	= parts per billion (ppb)
mg/L	= parts per million (ppm)	mg/kg	= parts per million (ppm)